RAILROAD WAREHOUSING SERVICE

By

FELTON CHOW

A thesis in Economics presented to the Faculty of the Graduate School, University of Pennsylvania, in partial fulfilment of the requirements for the degree of Doctor of Philosophy.

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To the Memories

of

My Parents

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PREFACE

The title of this thesis is inspired by the textbook "Railroad Freight Service" by Professor Grover G. Huebner and Professor Emory R. Johnson. In that book the authors present the subject of railroad freight service as a whole. In this monograph the writer presents in greater detail one phase of the railroad freight service, namely, the warehousing service.

The term warehousing is used in a broad sense and covers merchandise warehousing, cold storage, grain elevation and storage, commodity warehousing, bonded storage, and terminal storage. Such use of the term was adopted by the Department of Commerce in its first survey of the warehousing industry, published in "Monthly Summary of Commerce and Finance", September 1903. Since then the same use of the word has been followed by contemporary writers on the subject, such as Mr. H. A. Haring and Mr. A. Lane Cricher.

Commenting on the survey made by the Department of Commerce, Dr. C. S. Duncan, an economist of the Association of Railway Executives, wrote in 1920 in his textbook "Marketing" (p. 160) as follows:

"Thus begins the first and general investigation of warehousing by the government. Special studies on cold storages, grain elevators, and cotton warehouses have been made, and with special purposes in view. The economic problems connected with warehousing, and particularly the commercial aspects of these problems, have never been thoroughly discussed."

Since 1920 Mr. H. A. Haring published a book entitled "Warehousing" (Ronald Press 1925) dealing with the commercial, financial and legal aspects of public warehousing, and Mr. A. Lane Cricher put out a pamphlet on "Merchandise Warehouse in Distribution" (Trade Information Bulletin, Department of Commerce 1927). As for the specialized field of railroad warehousing, no comprehensive survey has ever been made.

This paper presents in detail the extent, organization, operation, services, and charges of the various phases of railroad

warehousing. Factors influencing railroad entry into the warehousing field and the effects of railroad operations upon other types of warehouses are analyzed. All important analyses and statements in the text are supported by documents reproduced in full in the Appendix. It is hoped that sufficient light has been thrown on the subject of railroad warehousing operations to justify the publication of this monograph, especially on the forces and manipulation behind the scenes of operation.

Interstate Commerce Commission dockets and railroad tariffs form the main sources of this study. In addition, material has been drawn freely from the Department of Commerce, Department of Agriculture, Federal Trade Commission, Shipping Board and Bureau of Railway Economics. These are supplemented by interviews and correspondence with railroad officials, warehouse executives and port authorities. Such current literature as is available has been consulted to contribute to the consideration of the economic problems.

Special acknowledgement is made to Mr. H. A. Haring, Contributing Editor of "Distribution and Warehousing", and to Dr. Victor S. Clark, Consultant in Economics of the Congressional Library, for guidance and suggestion in the preparation of this work. The writer is greatly indebted to Professors Emory R. Johnson, Grover G. Huebner and G. Lloyd Wilson of the University of Pennsylvania, for much constructive criticism and correction, to Miss Anna Belle Conard and Miss Lucy C. Conard of Provided Mutual Life Insurance Company of Philadelphia, for a careful reading of the manuscript and to his wife whose encouragement and assistance have made this study possible.

FELTON CHOW.

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CHAPTER I

RELATION OF WAREHOUSING TO TRANSPORTATION.

The business of warehousing is closely connected with that of transportation of commodities from place to place, and their transfer at railroad terminals to other lines, whether by water, by rail, or by motor. The two activities are so closely related that the railroads find it to their advantage to foster warehousing facilities along their lines. In terminal cities the railroads, either directly or through subsidiary concerns, have erected merchandise warehouses, produce terminals, grain elevators and other commodity storage houses which offer complete facilities to all customers. The relation is such that each aids the other. In-bound freights not immediately removed from the cars go into storage at the railroad warehouses under the storage clause of the Uniform Bill of Lading. In-bound freight for which the owner is unable to give immediate disposition, or which is to be held for later disposition is solicited for the railroad warehouses. These warehouses have direct rail connections with their termina freight stations, thus eliminating cartage and switching charges and extra handling with attendant delays and loss and damage incident thereto. Most of the reshipments from stock may also be made without the necessity and expense of cartage. The result of the close association of warehouse and railroad ownership and operation is that each brings traffic to the other in much the same manner that a branch line in the last generation "fed" the main line, and the main line "supported" the branch. The present importance of this situation is indicated by current advertisement of a principle trunk line which calls attention to the absorption of loading and unloading expenses by the carriers. (1) The Pennsylvania System States in its announcement (2) that warehouses are necessary adjuncts to transportation, and for that reason the system has established certain warehouses to serve

(1) Warehouse Facilities, Announcement of the Baltimore & Ohio Railroad, 1923.

(2) Warehouse facilities, Announcement of the Pennsylvania System, 1922

a large number of patrons. It purposes to perpetuate this department, to increase the number of warehouses, to enlarge those now in operation as rapidly as demands arise and financial circumstances justify. The System is forging a chain of storage warehouses which will eventually link together each city of importance to and from which it transports the freight of its patrons.

Warehouses may be used to relieve terminal congestion. The entire terminal problem is a matter of indefinite details. Each particular situation must be, in a measure, a law unto itself. The Interstate Commerce Commission has expressed the opinion, in the Manufacturers Railway of St. Louis case, that it is impossible to lay down any rule of action, and that what holds good for one city will be impracticable for another because of a different physical environment or distribution of traffic. (3) There is one problem that is common to all terminals; the problem of speedy releasing of freight cars. In the words of the Railroad Committee, United States Chamber of Commerce: (4)

"The prevailing practice is to notify the consignee of the arrival of L.C.L. freight after it has been unloaded in the freight house, or the cars containing C.L. freight have been placed on teams or industrial tracks. The railroads give the consignees 48 hours' free time for loading and unloading and for removal of L.C.L. freight from freight stations. Partly because of unorganized cartage method and inadequate storage facilities and partly because many goods are sold after arrival at the terminal, a large proportion of the consignees take full advantage of free time allowance .....Failure to remove L.C.L. freight from the freight house often results in such congestion that the equipment is held up and moreover causes a piling up of goods in the freight houses with resultant delay and confusion in locating and removing shipments....."

The duty of the railroad is to provide adequate and dependable transportation. This necessitates devoting its equipment and facilities to that purpose. Were it to attempt meeting the requirements of some shippers by allowing its cars and terminals to be used for indefinite periods as warehouses on wheels, there

(3) 21 I. C. C. 304

(4) United States Chamber of Commerce: Report of Railroad Committee 1921, p.11.

could be no adequate transportation. Therefore to release needed equipment and to keep the channels of transportation open, warehouses are necessary adjuncts to railroad systems. Without warehouses, railroads could operate neither efficiently nor economically.

Between the time when a freight car is delivered by the builder and the time it is first dismantled, it makes many trips, of which the following is the simplest: it is shifted into place to be loaded, it is drilled into a train, it is moved to destination, it is unloaded and is ready for another trip. The first and the last movements, that is, the loading and unloading features offer much room for improved efficiency in railroad operation. Calculations indicate that the average freight car is actually moving between one terminal and another only 11% of the time; that it is in the hands of the shipper or receiver about 37% of the time; that it is laid up for repairs about 9% of the time; and that it is 43% of the time in the process of being moved from the place where it is loaded or unloaded to the terminal where it is put in the train or transfer tracks. (5) The question is how to reduce the 37% and 43% of the time consumed, and in this problem adequate warehousing offer partial solution. Warehousing permits unloading promptly and release the equipment so that it may be turned back to the carrier for another load, thereby creating tonnage and revenue for the carrier.

Experience has indicated that it matters not what attractive feature a railroad can offer, if it cannot offer adequate and flexible warehousing and storage facilities, its freight service is unattractive. Warehousing facilities are necessary to equalize competition, facilitate the marketing or distribution of commodities and to introduce a flexible element in the railroad freight service so as to adapt the service as a whole more closely to the varying needs of commerce and industry. The requirement for storage is increasing as a result of the change of consumptive demand from necessities to luxuries—change from cotton hosiery to silk, from the one-horse buggy to gasoline engines; the demand

(5) Loree, L.F.: Railroad Freight Transportaton, 1929. Part V Movement of cars.

for fresh fruit for 365 days in the year, for strawberries when the temperature is at zero, for fall apples in June. With this desire for greater comfort and variety comes the need for specialized facilities to handle the commodities that enter into daily life. Not only specially built cars are necessary to transport the various commodities in commerce, but specialized storage is required to handle them at terminal and transit points.

At commercial and industrial centres such as New York City public warehouses are necessary to act as stabilizers to production and consumption, because most business firms in the metropolitan district do not possess storage facilities to handle carload lots. In this way the warehouses constitute the fly wheels that store up and then release energy vital to the machinery of the city. A city or a state depends wholly upon day to day transportation to meet its daily demands whether of finished goods for immediate consumption or of raw materials for industrial production could not maintain a state of permanent prosperity. (6) There would be periods of famine, owing to lack of sufficient supply, alternating with periods of glut brought about by an excessive supply and absence of adequate means to care for the surplus beyond immediate needs. Either condition could result in depression through unemployment for lach of materials to keep the wheels of industry moving and by reason of an unconsumed surplus dragging down all prices to ruinous level.

In a balanced society, warehousing has been so completely woven into the pattern of daily life that often no thought is given to its importance. The makers of paints and varnishes give no consideration as to whether it is the season for linters or linseed oil, nor the textile maker as to whether it is the month of cotton picking or wool shearing. The manufacturer so fully depends upon the delivery of his raw materials, either from the warehouse or from the railroad, that he proceeds with about the unconcern of the housewife who telephones for lettuce and tomatoes every

(6) Faster and more regular freight service tends to reduce the need for keeping large inventories. The extent to which expedited freight service makes possible rapid delivers and hence lower inventories will be discussed in Chapter VI Infra.

morning of the year, knowing that the grocer will procure them from some corner of the country and at a price not widely varying from summer quotation.

Not only to trade and industry, but to life itself warehousing is essential. As civilization progresses, the requirements upon storage facilities increase. When population concentrates in big cities, the work of feeding becomes a problem. In Greater New York, for example, one of the stupendous tasks of the business of transportation is to keep available a constant supply of foodstuff for the inhabitants in the metropolitan zone, a territory impossible of self-subsistence in so far as production of raw material is concerned. There are over nine million inhabitants in this zone, consuming on an average of $2\frac{1}{2}$ pounds of food per capita per day,—not only pure food but food selected with discriminating taste from a list of commodities produced under varied conditions. (6) The supply must be kept adjusted to the demand so that the price shall be renumerative to the producer and fair to the consumer.

No form of transportation alone regardless of how regular or rapid it might be could meet such requirements. If warehouses were not available as a balance between transportation and consumption there will be one period of glut and one period of famine. The highly fluctuating prices would bankrupt agriculture and with it the locality it serves. Fresh fruits and vegetables, fish, meats and dairy products without cold storage facilities at railroad terminals would cause enormous wastage. The greater the loss, the less interest would there be in production. There must be a regulator between production and consumption, to insure the steady flow of commerce, and warehousing facilities fulfil such purpose.

Transportation is the major function of the railroads. With certain limitations the greater the volume of traffic, the greater will be the railroad earning. To this end the railroads are giving unusual attention to increase, not only in volume but in variety of

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(6) See Regional Plan of New York: Monogram No 4, Transit and Transportation.

traffic. The transportation of perishables, grains, cotton and other commodities requiring special handling offer attractive sources of revenue. Transporting fresh fruits and vegetables hundreds and even thousands of miles and having them arrive in perfectly satisfactory condition requires highly specialized equipment and extremely fast train service. In the course of such a journey the contents of the car may be exposed to almost every conceivable variety of weather condition. At suitable intervals along the line, icing stations must be placed and at all principal destination special facilities must be provided for receiving the train, swiftly unloading its contents, placing the latter in cold storage if necessary and in many cases effecting the immediate sale of the shipment through auction companies attached to the produce terminals.

The transportation of grain calls for an organization as highly specialized as that of the produce terminal. The volume of wheat to be marketed each year is immense. The wheat fields are far removed from the seaboard, and the Pacific ports as yet are equipped to handle only a small share of the crops. The great problem is to forward the grain with smoothness and speed. Lack of facilities will only drive the business to a competing line. The handling of cotton likewise calls for special equipment, because of the inherant character of the commodity. A diversity of storage is necessary to attract traffic, because of the great variety of commodities that enter into the railroad transportation.

At the ports the interdependence of railroads and warehouses becomes even clearer. Storage is necessary for all goods which have missed the ship, for all that must await disposition and for proper assembling of lots of a single shipment. Even in the port of New York, where transit turnover is best, the average time elapsing between arrival of a shipment by rail and final delivery for steamship is more than two days. (7) In other ports this period is longer because sailings are less frequent.

The present method of export transportation which relies on

(7) Letter from Mr. Billings Wilson, Deputy Manager, Port of New York Authority dated, March 21, 1930.

freight cars meeting the vessel is an expensive process. It is inefficient and uncertain to hold cars for direct loading into ships. With the increase of export trade, a large number of freight cars are withdrawn from effective service. This results in excessive demurrage and congestion at terminals. To the owner of exporting goods the cost is disappointing because congestion prevents his meeting an expected vessel. By the time demurrage until next sailing is paid the favorable freight rate of one port may be overbalanced by excessive demurrage charges. To the railroads it is cheaper to hold the freight in storage warehouses than in cars. The value per car and space in a yard is estimated to be $1,500. (8) Interest, maintenance and depreciation charges on the cars and tracks for fifteen days free time in export trade are figured at $172, while if the same carload is placed in a warehouse on the same basis of interest, maintenance and depreciation charges, it will cost only $61. (9) The difference in cost between the two methods of storage is sufficient to compensate the extra handling expenses incident to warehousing.

Unlike cars, which obtain some revenue from demurrage, vessels held in port are accruing heavy charges from which there are no returns. Vessels are earning only when they are in motion, and time spent in port not only results in heavy direct and fixed charges, but also in the loss of revenue. Moreover the delay in port, both by cars and ships, decrease the efficiency of the transportation system, and caused a shortage of equipment. To show the savings that might be accomplished by the speedier turnaround of vessels in port, and analysis of the port performance and expenses of a selected steamship at New York was made by the Shipping Board through its Port Facilities Commission. (10) The ship was a steel coal burning vessel of 6,450 deadweight tons, handling both cargo and passengers. The following tables

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(8) Long, M.A.: Relation of Warehouse to port development, Proceedings of Society of Civil Engineers, October, 1921, pp. 328-331.

(9) Ibid.

(10) Memorandum of U.S. Shipping Board to I.C.C., p. 49, in I.C.C. Docket 12681 re Wharfage, Storage charges etc., in Atlantic and Gulf Ports (157 I.C.C. 663)

show the average daily expense during the 15 days spent in port and the possible saving from reduction of the turnaround.

Items affected by Shorter Turnaround

Accounts	Average Daily Expenses	Percent Total
Over head charges	733.49	35.5
Stevedoring	574 43	27.8
Wharfage	366.67	17.7
Vessel Supplies	115.32	5.8
Port Payroll	97.94	4.7
Clerking	76 72	3.7
Winchman	39 48	1.9
Watching Cargo	25.07	1.2
Lighting	23.80	1.2
Watching Ship	13.34	0.7
Total	2,066.26	100

Saving accomplished by Progressive Reduction in Turnaround

Days in Port	Number of Days Reduction	Amount saved
14	1	$ 2,066.26
13	2	4,132.52
12	3	6,198.78
11	4	8,265.04
10	5	10,331.30
9	6	12,397.56
8	7	14,463 82
7	8	16,530.08
6	9	18,596,34

Certain private terminal operators have realized the necessity for storage in addition to rail and shipping facilities and have in their consideration of their terminals taken the broader view. The result has been that economies have been effected in transportation through private terminals which have not been generally possible through the terminals constructed by the railroads. New York has two examples of the co-ordination of shipping and storage facilities in the plants of the Bush Terminal and of the New York Dock Company, and there are other terminals at various ports on the Gulf and Pacific which have appreciated the situation and have built plants in which the warehouse has been an integral part. The authorities in some of the Gulf and Pacific ports

appreciating the value of supporting storage at the waterfront, contemplate in their plans the provision of storage in order to relieve the transit sheds at the shipsides from the necessity of acting as warehouses, and this is an example of co-ordination in port design through the use of appropriate warehousing facilities.

CHAPTER II

MERCHANDISE WAREHOUSING

The railroad in carrying on its business of transportation has two functions to fulfil: to insure accessibility to markets for the producers, and to guarantee a constant supply to consumers. This results from the fact that the earning power of a railroad is dependant entirely upon the prosperity of the territory it serves, directly or indirectly. To insure accessibility to market and to bring about uninterrupted supply entail something more than merely fast and regular train schedules and ordinary terminals for delivery and receipt of shipments. They imply also the encouragement of enterprises having for their purpose the providing of facilities for storage of materials and goods in order to meet the requirements of the law of supply and demand.

Development of Railroad Warehousing Service:

In the early stages of railroad development, warehouses were unknown. Freight was handled directly to and from cars. In time it became necessary to add a covered platform at certain points where goods were to be held awaiting cars for transportation. As business increased freight stations were erected and these of necessity became larger and larger. The first mention of a warehouse is found in the Sixth Annual Report of the Pennsylvania System in 1853 when the purchase of the Powelton Estate in West Philadelphia was effected for general depot purposes.(1) In the same year warehouses at Newton and Hamilton and a warehouse-and-passenger station at Tyrone City were in process of construction.(2) In 1855, the erection of warehouses was reported at Hollidaysburg, Newport, Perryville and Altoona. In February 1856, the freight sheds on the Monongahila Wharf at Pittsburgh were abandoned and the Pittsburgh freight house was moved to the Duquesne Depot, now known as Duquesne Warehouse.(3)

(1) P.R.R. 6th Annual Report to Stockholder, 1853 p.19

(2) P.R.R. Report of 1st Assistant Superintendent, 1853 p.51

(3) P.R.R. Report of 1st Superintendent, 1856, p.49

Notwithstanding this increase in warehousing facilities, the demand for storage space increased so rapidly that the railroads were forced to provide storage on wheels. Railroad yards were enlarged so as to accommodate loaded cars which were held pending the consignee's convenience to unload. This caused an expense to the railroads that has added hundreds of millions to their investments for terminals. What was at the beginning an accommodation by the railroads to the shippers became such a load that they asked private warehousemen's assistance to relieve them of this burden.

The railroads were forced to provide storage by stress of competition between carriers. They allowed the consignee to use their cars as warehouses and salesrooms for days and weeks at a time for carload business, and they held L.C.L. freight in their freight houses at small or no cost for storage. This was particularly true at small settlements in their early development. Rail shipments were made to points along the newly laid road long before it could be commercially profitable.....to create the facilities of a commercial warehousing service, and it was natural that the freight cars and depots of the carriers should be pressed into the service awaiting pickup by the receiver of the goods.

Nothing objectionable was found in these practices until they brought the railroad into competition with other agencies designed to do the work. Upon a complaint by the American Warehousemen's Association in 1898, the Interstate Commerce Comission investigated[4] the matter and found that in New York, Philadelphia, Buffalo, Cleveland, Chicago, Kansas City, St. Louis, Louisville, Cincinnati and other points, free service was rendered in storage of freight, diversion of cars to shippers' use, part lot distribution and reconsigning privileges. Carload consignments of grain were held in railroad warehouses, free of charge, subject to the shippers' orders for delivery in part lots to various parties. Reports of such deliveries were made to the auditors of the railroad company and statements of stock on hand were rendered to the

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(4) American Warehousemen's Association vs. Illinois Central RR et al, I.C.C. Docket 496 (1898)

shippers. The regular storage rate was charged for all materials held beyond four days' limit but no charge was made for distribution. In New York one railroad stored in its warehouses located on the river front large quantities of tobacco, flour, canned meat, glucose, barbed wire and other merchandise and held the same subject to orders of consignees or shippers, free of charge, except as to flour. In some cases consignments were held there for two months or more before they were entirely removed. In Chicago the railroads agreed with shippers to hold and store their shipments, subject to shipping directions from time to time. The freight was received, stored without charge, forwarded and distributed to various consignees on orders from shippers. Neither the road nor the agent received any compensation for storing, forwarding or distributing the freight. It was the custom in case the warehouse in which the material was stored was crowded, to hold the same in cars until directions were received from the general freight agent.

The granting of such services was not through the free will of the railroads. It was to a large extent forced on them. The testimony of the railroad witnesses was unanimous that the railroads were compelled to provide these privileges by stress of competition between carriers.(5) Shippers would have been unable to obtain the concession if refusal to grant them by one carrier had not almost inevitably resulted in diversion of traffic to a competing line which conceded them. At the hearings (6) counsel representing several important lines denounced such practises as unnecessary and illegitimate and expressed the hope that the Commission would suppress them. As a result a general order was issued requiring all carriers to publish as a part of their schedules whatever free storage facilities were allowed. (7) The order of the Commission was further strengthened by the passage of the Hepburn Act of 1906 in which the meaning of "railroad" and "transportation" was extended and the power of the Commission increased. By Section 15 of the Interstate Commerce

(5) Ibid: Record pp.18-21, 32-35; 65-67

(6) Ibid: At Louisville, Kentucky, September 15, 1897.

(7) Order dated February 8, 1898.

Act as then amended the Commission was authorized when it was of the opinion after full hearing upon a complaint that any rates or charges or any regulations or practices affecting charges were unjust or unreasonable or otherwise in violation of any provision of the Act, to "determine and prescribe" just and reasonable rates, regulations and practices to be thereafter observed by the offending carrier. The greater authority given the Interstate Commerce Commission and the more rigid enforcement of the demurrage rules, removed from the railroads the burden of free storage which had been largely forced on them by large shippers.

The establishment of "free time" was defined by law. Car service and demurrage rules and charges, storage and handling rules and charges, together with regulations defining delivery to consignees either actual or constructive, have now divorced the two functions of storage and transportation. (8) Beyond the specific "free time", the railroad liability as carrier ends and under the Uniform Bill of Lading the goods may, at the option of the railroad, be sent to public warehouses for account of the shipper.

Although it is possible to separate the function of storage from transportation in thought, it is impossible to separate abruptly one function from the other in the process of distribution. Warehousing is an essential link in the chain of distribution, and it cannot be easily separated from other links without disrupting the organized whole. (9) With the ever increasing volume of freight and concentration of population there can be no return to the practice of early days of handling freight directly to and from freight cars. Hence the use of warehouses for a limited period of free storage is necessary. This period is followed by tariff charges for longer periods of storage, during which time the railroad's responsibility is altered from that of a common carrier to that of a

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(8) Cf. H.H. Hartman: "Law and Theory of Railway Demurrage Charges," Chapters III and IV "Assessment of Demurrage Charges", Traffic Publishing Company. Chicago, 1929.

(9) For a discussion on the relation of Warehousing to Transportation, see H.H. Shannon: Warehousing & Transportation: Traffic World March 22, 1930 pp.775-780

public warehouseman. This process encourages voluntary rather than involuntary storage. During the war the United States government created a vast number of storage depots and gave its endorsement to the indispensibility of warehouses as adjuncts to transportation and bases of supply. There is little difference in the method employed, except at concentration points between providing for a mobilized army and providing for the population of an industrial society.

Railroads as Warehousemen:

As a general rule the railroads do not operate storage warehouses as public warehouses, but have storage rules whereby a definite charge is made for all freight held in their freight houses beyond the specified limit of free time. In a number of cases, however, it has been found necessary that the railroad should operate warehouses for the storage of freight to meet the competition of rival carriers. Railroads are not permitted to compete by cutting rates. Their competition takes the form not of rates, but of superior services and convenient facilities, all of which save money for the shipper. Consignments of freight under drafts and other bank paper, shipments under bill of lading, the storage of refused, damaged and otherwise undeliverable shipments, protection of goods from weather, repair and restoration of goods injured in transit—these and other services inseparably associated with their business oblige the railroads to enter the warehousing field. In the exploitation of this field, the railroads use three agents: (1) the contract warehouse, (2) the leasehold warehouse and (3) the subsidiary warehouse.

Contract Warehouses:

Through the use of contract arrangements, the railroads have been able to secure the co-operation of commercial warehouses in diverting traffic to their lines. The contract covers two phases: leasing of property and handling of freight. The carriers lease to the warehousing company properties on the right of way at a low rental, and "hire" the warehousemen to load and unload carload freight at the warehouse platforms, which are usually designated as a part of the public freight station. The result is that each

aids the other. Traffic controlled by the warehouse feeds the railroad, and the allowances from the railroad support the warehouse. In Philadelphia, both Merchants' Warehouse Company and the Pennsylvania Warehousing and Safe Deposit Company were Railroad contract warehouses. In Baltimore, the Pennsylvania System employed the Terminal Warehouse Company, the Baltimore and Ohio Railroad employed the Camden Warehouse Incorporated and the Western Maryland Railroad employs the Baltimore Fidelity Warehouse Company. A similar practice was also in effect at interior points, including Chicago, Cleveland, Pittsburgh, Buffalo, Rochester, Troy, Green Island, New York and Washington, D.C. (10) Inquiries were sent to a number of warehouses which, according to government reports, (11) leased their premises from the railroads, but the returns to these inquires indicated unwillingness on the part of the management to disclose the nature of the agreement on the ground that "matter of leasing was private contract" and "not for public information". Information on the subject is available only in the dockets of the Interstate Commerce Commission, where a number of carriers and contract warehouses were required to file copies of their contracts in connection with recent cases in warehousing. (12)

ANALYSIS OF THE CONTRACT STIPULATIONS:

The railroad usually undertakes to lease either a complete warehouse or a plot of ground upon which a building is to be erected by the warehousing company at a rental equal to about 5% of the agreed valuation of the property. (13) The lease provides that the railroad company shall switch its cars to the warehouse on the same basis as it delivers or receives traffic at any other terminal

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(10) Loading & Unloading Freight 101 I. C. C. 394

(11) Port Series, Prepared by Corps of U. S. Army Engineers and U.S. Shipping Board. 22 Volumes.

(12) McCormick Warehouse Co. vs. P.R.R. I.C.C. Docket 15445 James Gallagher et al vs. P.R.R. I.C.C. Docket 20968

(13) For a reproduction of a number of these contracts, see Appendix. pp. ~~223-234~~ 145-204

controlled by the railroad in the city. The railroad shall pay the warehouse company a certain sum for each ton of freight loaded or unloaded through its plant. In addition to such amount paid by the railroad, the warehouse company may charge the consignee, shipper or owner reasonable and customary rates for any merchandise that it may store or handle, or for any other services rendered or facilities furnished. The practice of the railroads in using contract warehouses to load and unload carload freight dates back more than twenty years. (14) It was originated by the railroads to meet the competition of water carriers, as all traffic, carload or less, delivered to water carriers either by dray to the receiving platform of such water carrier at its dock or wharf, or by means of lighters loaded in various sections of the harbors and placed alongside of either vessel or the wharf, is loaded by the carriers. On inbound traffic the freight, both carload and less than carload, is unloaded from vessel and placed on the wharf available to the consignee over the delivery platform. This competition still exists at seaboard points, such as New York, Philadelphia, Baltimore, and Washington, D.C. At some points it is wholly impractical to permit consignees to perform the service of unloading. At New York, for example, the railroads have stations that are not reached by rail. It is necessary to float carload shipments to such stations and place the car ferries alongside a pier or dock, and the local railroad force must be utilized to do the unloading and to place the contents of cars at convenient locations on the pier where owners of freight can take delivery. Manifestly, it would be impractical to permit consignees or owners of freight to go to the pier and perform the service themselves.

At the stations the loading and unloading of carload freight, under the rule providing exceptions to the classification, (15) is performed by the railroads. At the contract warehouses, the railroads, instead of performing the loading and unloading service,

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(14) I.C.C. Docket 20968 Testimony of Mr. Funck, Assistant General Frt. Agent, P.R.R. pp. 461-464.

(15) Exception to Rule 27 of the Official Classification; P.R.R. Tariff GO.-I.C.C. No 14322 Rule 32.

contract with the warehouse companies whereby, in addition to according the railroads the use of space in their warehouses during the free time and other facilities, they also agree to load and unload the freight for the railroads. The warehouse companies further agree to act as agents of the railroad company for the collection of freight and other charges upon all such traffic as may be transported to and delivered at the warehouses, and such delivery is not regarded as relinquish-of possession of such traffic or of the lien for the freight. Such possession is to be held by the warehouses acting as agents in the enforcement of such lien and all the rights of the railroad companies.

The contract warehouses are expected to use all reasonable efforts to secure to the lines owned, leased, controlled and operated by the railroad company, all traffic controlled by the warehouse company. The traffic passing over the railroad lines has at all times the preference in the use of facilities furnished by the warehouse company over traffic passing over other lines, and without the consent of the railroad company the facilities shall not be extended to traffic passing over other lines. In addition it is generally provided that the warehouse company shall solicit consignments to the warehouse over the railroad company's line by mail and personal application to local shippers and consignees. Some contracts stipulate that a solicitor shall visit the Western shippers of flour in September and March each year, or more frequently if suggested by the railroad company, for the purpose of securing consignments over the railroad to and through the warehouses. The warehouse company shall make no other or greater charge for services rendered than that charged for similar services by warehouses upon competing railroad lines, unless the consent of the railroad company to make such higher charge shall be given in writing.

The allowances differ in amount and application according to the traffic. In certain instances they are applied to both carload and less than carload shipments, inbound and outbound, and in other instances they are given only on inbound carload shipments. They range from 2.5 cents per barrel on flour to 50 cents per ton

on other freight. That the allowances are substantial in amount is indicated by the payment made by the Pennsylvania Railroad to the Merchants' Warehouse Company, Philadelphia, a contract concern, during 1927 of approximately $200,000.[16]

Operation of Contract Arrangement:

The services performed by the contract warehouse for the railroad under the contract arrangement are as follows: The carload freight for which compensation is paid is always consigned to a person or a firm to whom the shipment is made "care of the contract warehouse company, designating the warehouse at which the delivery is to be made by the railroad".[17] The car is placed on tracks owned by the railroad company alongside of the platform of the warehouse. If the car is billed to the contract warehouse company or if the contract warehouse company has any interest in the contents of the car, it receives no payment for its service under the contract with the railroad.[18] The employees of the contract warehouse company then make a careful note of the contents, and the conditions of the seal of the car and keep a copy of the record, and the seals are broken, and the car doors are opened. An unloading crew and checker take the goods out of the car, package by package, keeping a careful record of the condition of each package as it is taken out of the car, and then the packages are loaded on a small buggy or truck, and the freight is transferred to some convenient place in the warehouse. When the entire contents are for one consignee, they are held in the warehouse subject to the order of such consignee. If the contents of the car are finally to be delivered to several parties, the individual consignments are stored in the warehouse separated in accordance with the brands and marks. A report is made to the railroad as to the condition of the contents of the car and the consignee named in the billing is notified that the shipment is ready for delivery. Under its contract with the railroad the contents of the

(16) Docket 20968 Examiner Brown's Report, Sheet 2.

(17) Ibid Record p.630

(18) Ibid Record pp.630-631.

car are then held by the warehouse to the order of the consignee for forty eight hours free time, and are insured by the warehouse. If the consignee does not take delivery within forty eight hours, the responsibility of the railroad ends and the contents of the car are stored in the warehouse to the order of the consignee, who thereafter pays to the warehouse its proper charges for storage. If the consignee takes delivery within forty eight hours, the warehouse delivers the contents of the car at its platform to the tailboard of the trucks sent by the consignee or to the parties to whom the consignee gives a written order for delivery. After the expiration of the forty eight hours, the contents of the car are held on storage in the warehouse for the owner, and are delivered upon his order subject to the payment of the warehouse charges. It is contended by the contract warehouses that the services rendered by them under the contract arrangement with the railroad are services in connection with the "receipt, delivery and handling of property transported" and such services are transportation services.(19)

While the aggregate amount of allowance given by each railroad to a contract warehouse along its line assumes a substantial figure, the amount paid is really less than the cost of the service as performed by the railroads at their own freight stations. An itemized statement dealing with the cost per ton of the physical handling of freight by the Baltimore and Ohio Railroad at its Camden and Locust Point stations in Baltimore shows that 35 cents a ton paid to the Camden Warehouse, Incorporated, a contract warehouse of the Baltimore and Ohio Railroad, is less than the actual cost of the service which that company performs. The costs at the Camden Freight Station, Baltimore, are as follows:(20)

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(19) Section 1 of the Interstate Commerce Act defines "transportation" as follows: "The term "transportation" as used in this Act shall include.....all services in connection with the receipt, delivery, elevation and transfer in transit, ventilation, refrigeration or icing, storage and handling of property transported."

(20) Docket 15445 Record p.62

Per Ton	1921		1922		1923	
	Nov.	Dec.	Nov.	Dec.	Nov.	Dec.
Checking	.169	.177	.207	.182	.164	.177
Trucking	.214	.206	.154	.139	.211	.189
Stowing	.068	.067	.078	.083	.074	.077
Calling	.072	.072	.082	.087	.077	.080
Total Cost	.523	.522	.521	.491	.526	.523

The above cost figures cover the handling of less than carload as well as carload freight, and would no doubt be lower if carload shipments alone were involved. They show, however, that the 35 cents a ton now paid the Camden Warehouse Incorporated, is not unreasonable even allowing for the economies which may be effected through conducting a wholly carload operation. This conclusion is substantiated by the data covering the operation at the Locust Point freight station of the Baltimore and Ohio Railroad, where the preponderance of the freight handled is in carload lots. The cost per ton shown at that station is as follows:[21]

	1921		1922		1923	
	Nov.	Dec.	Nov.	Dec.	Nov.	Dec.
Checking	.052	.053	.058	.075	.082	.075
Trucking	.181	.210	.231	.261	.293	.284
Total Cost	.233	.263	.289	.336	.375	.359

The contract warehouse in addition to performing the actual service of loading and unloading assumes under its agreement with the railroad certain further obligations, such as the collection of freight charges and an absolute responsibility for the freight during that portion of the forty eight hours free time period it remains in its possession. No specific monetary value can be

(21) Ibid p.63

placed upon these services to the railroad but their assumption by the contract warehouse must be given some weight in considering the propriety of the compensation paid to it.

The advantages gained by both carriers and the public in general, by reason of the favorable and convenient location of the warehouse properties of the contract concerns must not be overlooked. The difficulties of obtaining centrally located properties in large cities and the enormous capital investment this would involve would represent a cost to the carriers, in rendering the same services, far in excess of the amount which they pay to the contract warehouse.

From the standpoint of the carriers it is of paramount importance that the arrangement results in the expeditious handling of carload package freight through the convenient properties of the contract warehouse, resulting in prompt and speedy release of railroad cars and equipment. The withdrawal of the arrangement may result in a large volume of the carload traffic, which is now in the first instance consigned to the contract warehouse, being consigned to the already congested railroad delivery platforms, especially if the receiver has the slightest contemplation of removing the goods within the free time. The diversion of this traffic from the delivery platform of the contract warehouse to the public delivery platforms of the carriers, would result in congestion which would be of serious moment to both the carriers and the consignee. This is the reason that has prompted chambers of commerce, boards of trade, commercial exchanges, manufacturers' associations and other trade bodies to intervene in favor of the present arrangements.[22]

In the distribution of certain specialized commodities such as feed and hay, the use of the contract warehouse offers great benefit and convenience, primarily by reason of their central location and by their adaptability to the storage of these commodities, which has enabled the feed and hay trade to concentrate in the particular warehouses thus creating a central market. This arrangement is considered to be an ideal method of distributing these products to

(22) James Gallagher et al vs. P.R.R. 160 I.C.C. 563

retailers and small users in that it gives the opportunity of inspecting, sampling and selecting their purchases at the one place. It also enable the trade to have always available a force of inspectors to examine the quality and properly to grade such feed according to the standards of the trade.

On the other hand it must be said that the contract arrangement works to the disadvantage of the commercial warehouses. In the large cities the merchandise warehouse is used by manufacturers, producers, wholesalers and retailers to give their customers quicker and more efficient service than can be accomplished where they ship small lots of goods directly to retailers and consumers. Through the use of the merchandise warehouse, shipments are made in carload lots to the warehouse which ships out such parcels in less carload lots. Such use of the warehouse tends to reduce the spread between producers' and retailers' prices by lessening the time required for distribution of goods, and by reducing the transportation and handling costs which attend the direct shipping of goods in small lots by producers and wholesalers to consumers and retailers.

In competitive bidding by the merchandise warehouses for distribution business, the aggregate charge for the prospective service is the controlling consideration which induces the producers or wholesalers to patronize one of the warehouse companies in preference to another. The aggregate charge is made up of two items, namely, the freight rates and the warehouse service charges. The allowances granted by the railroads enable the contract warehouses to quote rates substantially lower than those paid by commercial establishments, and in consequence they are able to secure a large volume of traffic. In some cases, where the major portion of tonnage is customarily distributed within forty eight hours after arrival, the contract warehouses are able to quote free storage service. This free service is compensated by the railroad in the form of handling allowances.

With certain exceptions, all domestic carload freight is given forty eight hours free time.(23) During this period while the

(23) Agent B.T. Jones Tariff I.C.C. 1491, Rule 3

freight is held without storage charge the contract warehouses can and often do perform other services, such as separation and grading according to marks and description, and preparing for shipment to other points. For this they are compensated by the shipper. They are thus able while unloading merchandise for the carriers, to perform other independent services for the owners of freight, thus effecting a substantial economy in platform space, time and labor of handling freight. This practice operates to the disadvantage of the commercial warehouse, as it is required to provide platform space for the usual free time and sometimes to handle the freight without charge to shippers in order to meet the competition of the contract warehouse. A comparison of compensation in dollars and cents received by the commercial warehouse and the contract warehouse is given below. The basis of comparison is made on a typical car of marchandise weighing 40,000 pounds, the service to be rendered by each type of warehouse is identical in each instance:[24]

Case No. 1 Entire car going in to storage:

	Commercial Warehouse	Contract Warehouse
1. Charge from owner 50 cts. per ton 40,000 lbs.	$10.00	$10.00
2. Allowance from RR 35 cts. per ton on entire car.	none	$ 7.00
Total Compensation received:	$10.00	$17.00

Case No. 2 Half of car to be delivered in free time:

	Commercial Warehouse	Contract Warehouse
1. Charge from owner 50 cts. ton on half of 40,000 lbs.	$5.00	$5.00
2. Allowance from RR on 35 cts. a ton on entire car	none	$7.00
Total Compensation received:	$5.00	$12.00

(24) Examples taken from I.C.C. Docket 15445, op. cit.

Case No. 3 Three fourth of car to be delivered in free time:

	Commercial Warehouse	Contract Warehouse
1. Charge from owner on ¼ of 40,000 lbs. or 10,000 lbs. at 50 cts. a ton.	$2.50	$2.50
2. Allowance from RR 35 cts. on entire car.	none	$7.00
Total compensation received:	$2.50	$9.50

Case No. 4 Pool car, using 40,000 pounds as a basis:

(25)	Commercial Warehouse: Charge to owner	Allowance from RR	Total
5 to 15 separations:	$ 7.50	none	$ 7.50
16 to 20 separations:	$10.00	none	$10.00
21 to 25 separations:	$12.00	none	$12.00
	Contract Warehouse:		
	Charge to owner	Allowance from RR	Total
5 to 15 separations:	$ 7.50	$7.00	$14.50
16 to 20 separations:	$10.00	$7.00	$17.00
21 to 25 separations:	$12.00	$7.00	$19.00

Case No. 5 Pool car in which there not over four marks or separations to be delivered within free time limit:

	Commercial Warehouse	Contract Warehouse
Charge to owner:	none	none
Allowance from RR:	none	$7.00
Total:	none	$7.00

(25) Generally no charge for separation is made if the carload is separated into four or less lots. 148 I.C.C. 299,302.

From the above analysis it is clear that the commercial warehouse and the contract warehouse are not competing on the same basis. It is true that the allowances given by the railroad do not cover the handling cost, but they do contribute just that much towards the cost, and the consignees using the contract warehouse receive a service which such consignees could not reasonably expect from the commercial warehouse. To meet the situation, the commercial warehouses are given the alternatives of surrendering to the contract warehouses the business in which the latter have an advantage or to cut rates to meet their competition. In the handling of inbound shipments where the major portion of the tonnage is distributed to warehouse customers within free time limit, there is no way for the commercial warehouses to compete successfully with the contract warehouses. (26) In other traffic, testimony (27) indicates that when the commercial warehouses are able to reduce profits, quoting rates on the same level as the contract warehouses, they have an equal chance to attract traffic.

When shipments are sent under order notify bill of lading, the contract warehouses have an absolute advantage. The rules of the carriers governing transportation and delivery of shipment under order notify bill of lading, require the surrender of the bill of lading before or upon the delivery of goods. This requirement compels the buyer of such goods to take up the bill of lading by paying the invoiced price if the shipment as indicated by the sight draft attached to the bill of lading in the bank. This enables shippers to obtain prompt payment for goods shipped under order notify bill of lading. However, under the contract warehouse system the warehouses are made agents of the railroads, and in delivering goods to the warehouses as their agents the railroads do not require surrender of the bill of lading. The warehouse is engaged in affording storage, and of course long periods of storage produce larger earnings than short periods of storage. Hence business interests dictate long periods of storage

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(26) See Case No. 5 supra. p.24.

(27) I.C.C. Docket 20968, op. cit., Record pp. 75-86, 122-130, 165-171, 220-225.

which the warehouses encourage by permitting the order notify bills of lading and sight drafts to remain in the bank. Testimony shows that drafts for flour shipments in Philadelphia have remained unpaid during periods as long as six months. (28) This practice encourages the buyer of flour to route through the contract warehouses but it deprives the shipper of prompt payment of sight drafts on their order notify shipments.

LEGALITY OF CONTRACT AGREEMENT:

Evidently therefore the arrangement by which the contract warehouses act as the terminal agents of the railroads gives to such warehouses an advantage over other warehouses competing for the storage and distribution of merchandise. The legal point involved is whether such advantage is obtained through any violation of the Interstate Commerce Act.

The warehouses of the contract concerns are published in the tariff as a part of the freight station facilities of the railroads. The contract warehouse is made the agent of the railroad by the terms of the contract. The railroad does not publish in tariffs the amount of its payment per ton for the services performed by its agents, for the reason that the Act does not require such publication. A carrier may legally employ an agent to perform a service, payment for which is included in an inclusive rate, which, otherwise, the carrier would have to perform; and inasmuch as the total rate is not affected by such payment to the agent, and the agent has no interest in the rate or ownership in the freight, it is of no importance for the shipper to know what is paid by the carrier for the completion of a service which it obligates itself to perform.

The railroads have the right to make exclusive contracts for the furnishing of transportation facilities. The railroads are bailees undertaking to transport for hire the goods which the public wishes transported. In their capacity as bailees they are obligated to treat their patrons without unjust discrimination and to perform the services which the latter require at reasonable rates. But except in their capacity as bailees in respect to their patrons,

(28) Ibid: Record p. 230.

they are not under obligation to grant the latter similarity of treatment. The railroads are justified in acting freely, just as any other business enterprise, except insofar as specific statutory provisions may restrict their rights in this regard. They may employ one man and decline to employ another. They may choose one agency to perform a given part of their work and decline to employ another similar agency. Their liberty in regard to these matters results from the fact that the duty to treat without undue prejudice, and so forth, obtains only with respect to their relation as bailees to their patrons, who require the performance of the transportation service which they hold themselves out as ready to perform for all who may choose to employ them. In the language of the United States Supreme Court:[29]

> "So long as the public are served to their reasonable satisfaction, it is a matter of no importance who serves them. The railroad company performs its whole duty to the public at large and to each individual when it affords the public all reasonable express accommodations. If this is done, the railroad company owes no duty to the public as to the particular agencies it shall select for that purpose. The public require the carriage, but the company may choose its own appropriate means of carriage, always provided they are such as to insure reasonable promptness and security."

The St. Louis Terminal case [30] well illustrates this situation. In St. Louis the Eastern Railway Company's lines had terminals in East St. Louis only, and in order to furnish the public a service that was sufficiently prompt to enable its lines to secure their fair share of the traffic, it made arrangements with certain transfer companies to move its freight by wagon between St. Louis and East St. Louis. As a part of the arrangement, the transfer companies undertook also to furnish and operate stations in St. Louis where they could receive and deliver freight for the railroads.

The freight stations are in buildings owned or leased by the transfer companies as agents of the railroads. In these buildings

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(29) Express Case, 117 U.S. 1, 24.

(30) 34 I.C.C. 453, 456.

these transfer companies also transact the business of warehousemen. Other transfer companies complained that this arrangement was a discrimination against them. In dismissing the complaint the Commission said:[31]

> "We must hold that the advantage enjoyed in their private capacity by the warehousemen conducting the 'off track' stations for the respondents, is incidental and not undue, under the Act to Regulate Commerce as amended. These conclusion rest upon the fact that the 'off track' stations are in good faith kept open to all shippers as public freight stations of the carriers, this being the test applied in United States vs B. & O. R. R. Co., 231 U. S. 274".

The decisive fact in the case was that the station was "in good faith kept open to all shippers as public freight station." In the actual practice while the contract warehouses are listed in the tariff as part of the station facilities, and are nominally open to the general public to be used as freight stations for receiving forwarding freight, they are not actually used except by those who employ them to store, distribute or perform some other warehousing service in connection with their goods. In the Philadelphia case, Gallaghar vs the Pennsylvania Railroad, the complainant tested the sincerity of the Pennsylvania tariff by employing two truckmen to take loads of freight to two warehouses of the Merchant Warehouse Company, a Pennsylvania contract concern, and to tender that freight outbound over the lines of the Pennsylvania System. [32] In this test, the employees at those warehouses denied that they were public freight stations, refused to accept the shipments, and directed the truckmen to take the freight to certain specified freight stations of the Pennsylvania Railroad.

If the contract warehouses are not in good faith kept open to all shippers as public freight stations, are the allowances given to them justifiable? The contract between the railroads and the contract warehouses, under which the contract warehouses receive compensation for loading and unloading freight, provides also that

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(31) 34 I.C.C. 453, 462.

(32) Docket 20968 op cit. Record pp. 838-839.

the contract warehouse shall: (33)

"accord at all times to traffic passing over the lines owned, leased, controlled, and operated by the Railroad Company preference in the use of the facilities furnished by the warehouse company over traffic passing over other lines, and without the consent of the railroad company the said facilities shall not be extended to traffic passing over other lines.

"Should control of the warehouse company pass into the hands inimical to the interests of the railroad company or should the warehouse company in any respect violate or fail to comply with any of the conditions and covenants herein contained, then this agreement shall, at the option of the railroad company on thirty (30) days' written notice to the warehouse company cease and determine and become absolutely void."

The contract also provide that no compensation will be paid upon traffic: (34)

"which it is customary for the railroad company to receive or to deliver directly from or to car ontrack and not through railroad warehouse or across railroad platform, nor upon traffic the movement of which by the railroad company has been performed at a switching charge."

The restriction of the allowances to freight traffic on which those the railroads derive greater than switching revenue, that is, to line haul traffic, suggests that the allowances may not be compensation for performance of service, but may be measurement of sums of money paid to buy line haul freight traffic which produces larger revenue than switching traffic. The cost of loading or unloading freight handled in switching service presumably is as great as the cost of loading or unloading such freight in line haul service, and, therefore, if the contracts under consideration provided for the payment of compensation either for services rendered directly by the railroads, or for the use of an instrumentality utilized in the service of those railroads, then switched traffic would not be deprived of the benefit of the allowances. A freight handler would not agree to load or unload switch freight free of charge unless it was his own freight.

(33) 148 I.C.C. 299,304.

(34) Ibid.

While the contract warehouses are not the owners of the goods received or shipped by them, all of the railroads' dealings are with the warehouses and none with the owners of the goods. In the case of many of the shipments unloaded at the contract warehouse, the warehouse is, to use the definition of the Bill of Lading Act, (35) the only "person to whom delivery of the goods" could be made as a carload shipment. The real owners of these goods are generally out-of-town concerns, who rely on the contract warehouse to accept delivery of the goods for them and distribute them in less than carload lots. Even in instances where the real owner is in town, delivery to him is made in small lots as his needs require. The contract warehouse is the only party having direct relation with the railroad in the transportation of the goods as carload shipments, and the same is true of outbound shipments where in most instances it acts as a forwarder. This is part of the service which it supplies as a merchandise warehouseman. In reference to situation of the same character, the Commission has said : (36)

"But when a warehouseman acts as a consignee or consignor he becomes a shipper and has all the rights of a shipper under the Act. He stands in fact, in the shoes of a shipper and may make any complaint either of rates or practices that his principal, the real shipper, might himself make."

The contracts between the railroads and the contract warehouse recognize that these warehouse companies control the routing of freight traffic. A concern that controls the routing of freight traffic. A concern that controls the routing of freight traffic, although it may not be the owner of the freight, is the shipper of the freight. (37) When contract warehouses solicit the shipping of freight to their warehouses from virtually all points in the country and thereby cause freight to be transported over the lines of the contract railroads, although they are not named as "consignees" in the bill of lading, they are in law, the

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(35) 39 Stat. 545 Section 42.

(36) St. Louis Terminol case. 34 I.C.C. 453.

(37) U.S. vs. M.R.T. Co. 145 Federal 1007, 1012.

consignee of shipments. (38) It is the substance and not the form of the billing that controls. (39)

The present status of the contract warehouse was settled by a decision of the Commission in McCormick Warehouse Company vs. Pennsylvania Railroad, (40) in which the commission reversed the findings in the orginal report. (41) Under the later decision, which is controlling, the contract warehouses are recognized as shippers and receivers of goods, although not the owner, and therefore the practice of making allowances to them is "unjustly discriminatory and unduly prejudicial". This decision was confirmed in Gallagher vs. Pennsylvania Railroad, in which the Commission said: (42)

"Following McCormick Warehouse Company vs. Pennsylvania Railroad Company, and upon this record, we find that the practice of defendants in making allowances to the contract warehouses in connection with the loading or unloading of package freight at Philadelphia as aforesaid, and refusing to make similar allowances to complainants for performing similar services, results in unjust discrimination, in undue preference of the contract warehouses, and in undue prejudice to complainants. The record discloses, that these allowances are nothing more than a device to attempt to lend legality to the payment of rebates to the contract warehouses. It is apparent that the unjust discrimination and undue prejudice can lawfully be corrected only by terminating the allowances. Defendants will therefore be required to cease and desist from publishing or making such discriminatory and preferential allowances."

This decision was confirmed by the Federal Court, (43) in which Judge Thompson in rendering the decision says in part:

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(38) U.S. vs. Metropolitan Lumber Co. 254 Federal 335, 346.

(39) La. RR. Com. vs. T. & P. Ry. 229 U.S. 336.

(40) 148 I.C.C. 299; 31 Federal (2nd) 951.

(41) 95 I.C.C. 301.

(42) 160 I.C.C. 563,569.

(43) Merchant Warehouse Co. et al vs. I.C.C. In equity No. 5789, No. 5791 opinion of the Court filed October 8, 1930. In the District Court of U.S. for the Eastern District of Pennsylvania.

"We conclude that the payment of the allowances by the railroads under the contracts comes within the provisions of Section 2 of the Interstate Commerce Act, as amended by Section 404 of the Transportation Act of 1920, in that the contracts constitute devices whereby the carriers receive from the contract warehouses, through the deduction out of freight rates of the allowances, a less compensation for services rendered than they charge and receive from the intervening warehouses for doing a like service under substantially similar circumstances and conditions, and thereby subject the latter to unjust discrimination. "We further conclude that, under Section 3 of the above Act, the payment of the allowances gives an undue and reasonable preference and advantage to the contract warehouses, and subjects the intervening warehouses to an undue and unreasonable prejudice and disadvantage."

LEASEHOLD WAREHOUSES:

A large number of buildings and sites along the railroad right of way are leased to warehouse companies and to manufacturers for warehousing purposes. For lack of a better term, they are called leasehold warehouses, as contrasted with the contract warehouses described in previous pages. The leasehold warehouses are not obligated to act as agents of the railroad in loading and unloading freight such as in the case of the contract warehouses. They are independent concerns which lease properties from the railroad; their relation with the railroad is that of a lessee.

There are two forms of leases, the indefinite term lease and the long term lease. The indefinite term lease is generally granted to warehouse companies which are not required to put in heavy fixed investments or erect expensive structures. It usually contains provisions for termination by either party upon thirty, sixty or ninety days' notice. The long term lease is granted only at important stations and only in cases where expensive and permanent structures are to be erected by the lessee; such leases are not made unless officers of the railroad are reasonably sure that the premises will not be required for railroad purposes during the term. (44) In securing and in acting upon applications for leases,

(44) Northern Pacific Railroad Co.: Rules Governing the Protection & Occupancy of Right of Way & Other Operating Properties. St. Paul, Minne., January 1, 1926.

employees and officers of the railroad are directed, among other things, to consider the traffic and other benefits that will accrue to the railroad company. It is provided in the rules of one road that "unusual care must be exercised by all officers passing upon long term lease applications and there must be decided traffic advantages to warrent favorable recommendations." (45)

In general the lease provides that the lessee shall erect, or continue occupation of, improvements upon the leased sites for purposes specified, and shall not permit, the premises to be used or occupied for any other purposes or sublet the property or assign the lease without the written approval of the lessor. Rates being favorable, the lessee will do all his transportation business over the lessor's railroad in preference to any other, and no other railroad or transportation company shall be allowed to use any track extending to the premises without permission in writing from the railroad company. (46) If the lessee shall fail for a period of three months to occupy and use the premises, they shall be deemed to abandoned and the railroad company shall thereupon have the right to lease them to other parties. If the railroad shall require the premises for railroad purposes during the term of the lease, it may terminate the lease upon written notice of not less than six months. (47) In case of such termination the railroad shall purchase from the lessee all his improvements, and pay a sum equal to their actual value at the time such notice is given, which shall not exceed the cost at the time of new similar improvements, with proper allowance for actual depreciation. If the parties fail to agree, such valuation shall be determined by three disinterested appraisers. These are the general terms governing the long term lease, as for the short term lease the following example may be considered representative : (48)

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(45) Ibid, pp. 7-8.

(46) Northern Pacific Ry. Co., : Long Term Lease, Form R.W. 2, Clauses 2 & 3.

(47) Ibid : Clause 6.

(48) This Summary is taken from I.C.C. Docket 12681 re Charges for wharfage, handling, storage and other accessorial services at Atlantic and Gulf Ports, Exhibit S.A. 44.

Summary of Terms of Lease Covering Warehouse C at Wilmington, N. C.

Lessor: Atlantic Coast Line

Lessee: Nitrate Agencies Company

Date of Lease: July 9, 1923

Duration of Lease: 3 years, effective September 1st, 1923, and thereafter, to be terminated 6 months' notice.

Rental: $6,000 per year, payable monthly in advance.

Description of Premises leased: Warehouse C containing 20,000 square feet, together with wharf and platform.

Miscellaneous terms: Lessor pays taxes approximately $646.80 per year Lessor pays insurance approximately $143.00 per year Lessor to repair substructure below bottom of floor joists at own expense.

Lessee to route all traffic over Atlantic Coast Line as far as lawful, when routes are not higher than other carriers.

Lessee to pay taxes on additions and betterments made by it.

Lessee to repair at own expense above bottom of floor joists and may alter premises providing restoration to original plan is made on expiration lease.

Lessee to use lessor's spur track adjoining premises.

A study of the above terms will reveal that the railroads' concern as to the character and use of improvements upon the leased property is due to a desire that the lessees should be producers of traffic; and the provision regarding the routing of shipments go but a step further in the same direction. It is a general practice that lands in excess of anticipated needs for railroad use are usually acquired at stations with the intent of leasing to persons or corporations requiring direct and expeditious handling of freight to and from their places of business and controlling the movement of a relatively large volume of carload traffic. It is quite evident from the terms of the contract that traffic considerations are uppermost and controlling in the minds of the railroad officers charged with the leasing of industry sites.

In the same manner traffic considerations are used by shippers to induce railroad officers to grant lease on industrial sites : (49)

"The traffic which you are now enjoying from other interests making application for these yards, cannot be very much increased. They already control to a large degree your icing facilities which are very valuable and through which you are strongly allied, and the tonnage you are now enjoying can reasonably be considered as a maximum. Therefore, the forming of an alliance with our interest should be the means of bringing to your lines a great additional tonnage, and these facts, we feel, should appeal to you as the traffic director of the Pennsylvania Lines, as to why it would be inadvisable to make any arrangement at Jersey City which does not contemplate our interest being included therein."

Another letter from a high railroad official strikes on the same note of traffic development in the leasing of warehouse sites : (50)

"After having its (Atlantic Coast Line) Tampa storage warehouse lie idle for two or three years, with no maintenance, the Seaboard accepted a proposal from a local stevedore, W. L. Block, under which Blocks undertook to pay rental for the property and maintain and operate it, including the expenditure necessary to put the warehouse and wharf alongside in condition. While the Seaboard receives little line haul tonnage through this storage warehouse, it, under this arrangement, receives a rental for the warehouse and is saved all the operating and maintenance expenses, and the war house under Blocks' operation serves a great public need at Tampa.

"Following this Tampa arrangement the Seaboard was successful in making somewhat similar arrangement with other public stevedores and warehousemen for the lease of its storage warehouses at Jacksonville, Charleston and Wilmington. Under all these arrangements the Seaboard earns a rental charge, is saved the cost of maintenance and operation, and its line haul tonnage has been increased."

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(49) Letter from A. W. McLaren to G. D. Dixon, vice president, P. R. R. dated Chicago, Ill., September 27, 1912.

(50) Letter from C. R. Capps, first vice president, Seaboard Air line, to Interstate Commerce Commission to "give briefly the reasons actuating the Seaboard Air Line Railway in leasing to parties doing a public warehousing and stevedoring business portions of its water front terminals, more particularly its storage warehouse, at Tampa, Fla, Jacksonville, Fla., Charleston, S. C. and Wilmington, N. C.", dated Norfolk, Vd., October 25, 1926.

From the standpoint of the railroad there are good reasons that every facility should be used to develop traffic. The railroad is an industry of increasing return, that is, an industry in which an increase in the output of traffic does not involve a corresponding increase in the cost of transportation. (51) Any means that leads to a more complete utilization of the existing plant will be desirable. From the standpoint of the public, when the railroad leases its facilities and property to the shippers for such consideration and upon such terms as to have the effect of reducing the rates and charges such practices are objectionable, for they may work to the disadvantage of the shippers not receiving such privileges. To illustrate, the Seaboard Air Line leases a bulk storage warehouse 76,000 square feet to an individual at Charleston, South Carolina, upon the basis of an annual rental of $6,000. This lease is dated August 25, 1923 (52) and provides that the lessee will collect the tariff charges from those using the warehouse. These charges are retained by the lessee. Prior to this lease the revenue from storage in this warehouse were collected by the carrier under its own operation and tariff charges and resulted in net amounts of $17,629.94 for the fiscal year ended June 30, 1922 and $22,211.90 for the following year. These amounts do not take into consideration, maintenance, depreciation, dredging or interest on investment. The annual return under the $6,000 rental on the property yields the Seaboard Air Line about 7.8% on the tentative value determined by the Bureau of Valuation of the Interstate Commerce Commission and 2.2% on the value claimed by the Seaboard Air Line. (53) These values are merely physical and do not represent the earning value of the warehouse which apparently is far in excess of the physical value.

Another illustration may be taken from the Illionis Central Railroad which leases sections of the Stuyvesant Warehouse to

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(51) For a discussion on the subject of increasing return, see F. W. Taussing: Principles of Economics, Vol I Chap. 14, also Vol II pp. 393-394; and W. Z. Ripley;: Railroads: Rates and Regulation pp. 72-75.

(52) I. C. C. Docket 12681 Exhibit S. A. 45.

(53) Ibid.

shippers of fertilizer at New Orleans for one cent per square foot for thirty days; 2.5 cents per square foot for ninety days; and cancellable on thirty days' notice by either party. (54) These rates are less than those under tariff storage charges (55) and thus the shipper is enabled to gain an advantage in charges over those who choose to use the other carriers' storage at the tariff rates. It was testified that the Illionis Central Railroad engaged in this practice at New Orleans to meet the competition of the Southern Railway at Port Chalmette, Louisiana, and that before it undertook to meet this competition it lost considerable line haul traffic to lines that leased their warehouses. (56)

The leasing of a warehouse to an individual who controls the routing of traffic for a sum of $6,000 when $17,000 to $22,000 can be earned under the tariff charges can only be justified when there is a sufficient gain in the volume of traffic to compensate for the loss in rental charges. Such justification, however, is limited to the business aspect of the question. When it comes to the question of public relations, the railroad may not unduly favor one shipper to the disadvantage of another shipper. (57) When a railroad leases its warehouse facilities for periods of thirty to ninety days, presumably covering particular seasons, at a rental that is not reasonably compensatory, this may constitute a discrimination against the smaller shippers who must avail themselves of space at the tariff rates. (58) When the season is over the warehouse must remain idle for the remainder of the year.

The Interstate Commerce Act contains no provision by which the Commission is given direct power over the leasing of

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(54) 157 I. C. C. 663, 690 (1929).

(55) Emerson's Tariff I-L, I. C. C. No. 75.

(56) I. C. C. Docket 12681 re Wharfage etc. charges at Atlantic & Gulf Ports, Hearings at New Orleans, March 14, 1928.

(57) Sections 2 and 3 of Interstate Commerce Act prohibit undue preference and undue prejudice to persons or localities.

(58) 157 I. C. C. 663, 690.

properties, to prescribe or regulate the terms and conditions under which the railroad may lease their warehouses to shippers or warehouse companies. The authority which the Commission has over such leases is entirely indirect, and comes into being only where the lease results in some violation of the Interstate Commerce Act or of another statute which the Commission administers. (59) Such violation occurs when the conditions of the lease are so favorable to the shippers that it is clear that the real consideration for the lease must in part be found elsewhere, namely, in the freight which he ships over the lines of the lessor carrier. Until the final valuation of the railroad properties is determined by the Commission, there is no basis upon which to judge the adequacy of the rental, and the Commission can do no more than to direct attention to the possible inadequate rental of the property.

Subsidiary Warehouses:

By subsidiary warehouse is meant a warehouse which is directly owned and operated by a railroad as a subsidiary. The extent of such direct operation of the railroad is small. Inquiries on warehouse operation were sent to fifty Class I railroads, and ninety percent of them answered. Of this total, twenty four reported one or more public warehouses operated as subsidiaries. (60) Of those answering, the Baltimore and Ohio Railroad leads with twelve warehouses linking Washington, D. C., Baltimore, New York City and Cincinati. The Pennsylvania System comes second with subsidiary warehouses in Chicago, Erie, Pittsburgh and Harrisburg. The remaining carriers operate from one to three warehouse. Considering the close relation of warehousing to transportation and the volume of traffic handled by the Class I carriers, the number of warehouses operated directly by them is small, but the number of warehouses built by them and leased to large shippers is increasing. The reason for this is that the

(59) In matter of Leases and Grants of Properties by Carriers to Shippers, 73 I. C. C. 671, 682.

(60) See Table on pp. 44-46, this table was compiled from answers to questionaire, supplemented by government publications.

railroads operate warehouses for the purpose of developing traffic. (61) Contract and leasing arrangements fulfil such purpose. The contracts and leases made by railroad warehouses with large shippers tend to give permanence to inbound and outbound tonnage over the rails of the carrier providing such warehouses. In large warehouses of this type a community of interests is at once created. (62)

The subsidiary warehouses controlled by the railroad are either separately incorporated or incorporated in groups. In the Pennsylvania System the four warehouses are operated by two corporations, the Duquesne Warehouse Incorporated and the Western Warehousing Corporation. The entire warehouse system is responsible to the warehouse superintendent. On the Baltimore and Ohio Railroad, the warehouses at each locality are under a manager who reports directly to the assistant to president. On other roads the warehouse managers generally report to the traffic department.

Public Merchandise Warehouse Owned or Operated by Railroads.

1930

Railroad	Warehouses	Whether operated by Rd. through subsidiary or leased to others
Baltimore:		
B. & O.	Camden Warehouse	operated
	B. & O. Tobacco Warehouse (*)	,,
	Fort Ave. Warehouse	,,
P. R. R.	Bonded Warehouse, Canton	,,
	Monument Store	,,
	Flour Warehouse	,,
	Tobacco Warehouse (*)	,,
Western Maryland	Port Covington	,,
	York Street	,,
	Brown Street	,,
	Fidelity Station	,,

(*) These Warehouses also handle general Merchandise

(61) Interview with Mr. Edwin Morton, Manager, B. & O. Stores, New York and Mr. R. L. Spencer, of P. RR.

(62) Letter from Mr. J. L. Eysman, Vice President, in Charge of Traffic, Pennsylvania System, dated March 25, 1930).

Railroads	Warehouses	Whether operated by Rd. through subsidiary or leased to others
Boston:		
Boston & Albany	B. & A. Terminals East Boston	operated
Boston & Maine	Hoosac Storage Warehouse	,,
	Quincy Market Warehouse	leased
N.Y.N.H. & H.	Merchants Warehouse	,,
	Northern Ave. Store	,,
Brunswick:		
Southern Railway	Southern Warehouses	operated
Southern Pacific	East River & Mansfield St.	leased
Charleston:		
Atlantic Coast Line	Southeastern Warehouse	,,
Chicago:		
P. R. R.	Western Warehouse	operated
Michigan Central	Michigan Warehouse	leased
N. Y. Central	Taylor St. Warehouse	,,
Sue St. Marie	Soo Terminal	operated
Chicago & N. W.	Merchandise Mart	leased
Chicago B. & Q.	Crooks Terminal	operated
Chicago & Alton	Alton Warehouse	,,
Cincinnati:		
B. and O.	B. & O. Warehouse	,,
Cleveland, Cincinnati, Chicago & St. Louis	The Big Four Warehouse	,,
Cleveland:		
B. & O.	Valley Warehouse	,,
N.Y. Chicago & St. Louis	Cleveland Warehouse	,,
Dallas:		
M. K. T.	M. K. T. Warehouse	,,
Santa Fe	Santa Fe Warehouse	,,
Detroit:		
Pere Marquette	Pere Marquette	,,
Erie:		
P. R. R	Fort Erie Warehouse	,,
Harrisburg:		
P. R. R.	Keystone Warehouse	,,
Jersey City:		
P. R. R.	Penn. Warehouse & Dock	,,
D. W. & L.	D.W.&L. Warehouse, Hoboken	,,
Erie	Seaboard Warehouse	,,

Railroads	Warehouses	Whether operated by Rd. through subsidiary or leased to others
New York City:		
B. and O.	26th Street Store	operated
	East Pier Stores	,,
Lehigh Valley	11th Ave. & 26th Street Store	,,
N. Y. Central	Shepherd Warehouse	leased
New Orleans:		
Illinois Central	Stuyvesant Dock	,,
Newark:		
Central of N.J.	Newark Warehouse	operated
Erie	Erie Warehouse	under construction
Norfolk:		
Norfolk & Western	Warehouses A and B	operated
Norfolk & Southern	Warehouse W	leased
C. and O.	Northside River No. 5	operated
P. R. R.	New Warehouse	leased
Oakland:		
A. T. & Santa Fe	Alice Street Warehouse	,,
Philadelphia:		
P. R. R.	30th & Chestnut Streets	,,
Reading	Terminal Commerce Bldg.	,,
Pittsburgh:		
P. R. R.	Duquesne Warehouse	operated
Rochester:		
Buffalo, Rochester & Pittsburgh	B. P. & P. Warehouse	,,
St. Louis:		
St. Louis—San Francisco	Cotton Belt	,,
San Francisco:		
Southern Pacific	Grocer Terminal	,,
	Haslett Warehouse	leased
	Oriental Warehouse	,,
Savannah:		
Central of Georgia	Warehouse No. 2	operated
Tampa:		
Atlantic Coast Line	A. C. L. Warehouse	,,
Wilmington, N.C.:		
Seaboard A. L.	Wilmington Warehouses	leased

FACILITIES :

In order to understand the operating economies of the railroad warehouse, it is necessary to understand the general feature of the warehouse. Railroad warehouses are generally built in conjunction with freight stations. Owing to the high cost of land in urban centres, it is more economical to operate freight stations utilizing the space above the freight station to produce additional income. When there is need for an urban freight station, the railroad instead of building a one-story station will erect a multi-story modern structure, using the street floor for tracks and handling freight and the upper floors for a warehouse. It is an application of the "air right" as an instrument of earning.

The Polk Street Freight Terminal, Chicago, of the Pennsylvania System may illustrate the purpose and building features of a railroad warehouse. When the ground occupied by several of its freight houses was surrendered for the construction of the Chicago Union Station, the Pennsylvania System had to build a new freight station to meet the very heavy package freight business concentrated in the business centre of the city. To put the freight station on a self-supporting basis, it combines both in-bound and out-bound houses as well as three floors for warehouse and storage purposes, in one structure. Some idea of its size may be gained when one realizes that beneath the structure there is track space for 360 cars, 18 tracks of 20 cars each.

The building is five stories high including the basement. As the streets at both ends of the house are on viaducts the socalled street or first floor is one story above the tracks at the ground level or in the basement. It is on the street floor that freight is received from and delivered to shippers. This floor is divided into an outbound house and an in-bound house by a driveway which runs through the entire length of the building.

The second, third and fourth floors are used for storage and warehouse purposes, with the exception of a section of the second floor which is divided up into offices for the agent and cashier and for the billing and transfer departments. There are 36 electrically operated elevators, for freight and passenger service, varying in

capacity from five to ten tons. Electric tractors provide rapid transit between warehouse and freight station. The building has a connection with the Chicago Tunnel, and in addition to this outgoing service, re-shipments are made over the Pennsylvania System or any other system, East or West, without the necessity of trucking.

Although the building is fire-proof throughout and is of steel frame construction encased in concrete, an efficient sprinkler system is installed throughout the building to protect the merchandise in storage. There is a 50,000 gallon storage tank in the tower and there are two 14 inch pipes extending to the river and connected with the sprinkler system so that in case of emergency water may be had independently of the city. Serving these river mains there are two automatic eletrically operated pumps each of a capacity of a thousand gallons per minute.

The Camden Warehouses, Baltimore, of the Baltimore and Ohio Railroad are examples of railroad warehouses of the less elaborate type. The warehouses consist of six adjoining and communicating buildings separated by fire walls. Each building consists of a basement, seven floors and a platform and is equipped with two rapid elevators of heavy carrying capacity. Some buildings are provided with chutes for descending freight. The warehouses store all class of non-hazardous merchandise and are located in the heart of the wholesale district and close to the retail centres. They are operated in connection with the main local freight station of the Baltimore and Ohio Railroad. This means that no cartage or delay is involved when consignees desire to put their goods in storage, and there is no cartage in making out-bound shipments of any size via the Baltimore and Ohio Railroad. The absorption of cartage together with the relatively low insurance rate have put the railroad warehouses in preferred position in the field of warehousing.

Practically all the railroad warehouses have an advantage over the commercial warehouses in that the former are always located on the railroad track, and some both on the railroad tracks and water front. This makes it possible to unload shipments

promptly and with a minimum amount of labor, which would not be the case if the warehouses were not so situated and the goods had to be trucked from railroad team tracks. Some railroad warehouses are located near the water front and are equipped with docking facilities so that import and export cargoes can be handled by lighters to and from shipside. Such warehouses handle and distribute both foreign and domestic business equally well.

It cannot be set down in definite rules what is the best location for a railroad warehouse. The question of what might have been the best policy when a city was still small must give way at later date to new conditions. These conditions may include growth of traffic, density of population, concentration of market, relation to freight terminal, cost of land and distance of delivery point.

OPERATION :

The commodity which a warehouseman sells is space for storage. No warehouseman can hold its customers long unless he constanly or at least generally has on hand some stock of the only line he sells, namely, space for storing merchandise. This means some working space must always be reserved to meet the fluctuating demand of business. In addition, space must also be reserved for the permanent aisles which are necessary for the economical handling of goods between the elevators and the piles, and to furnish access for firemen under the fire regulations. When the two items, working space and aisle space, are deducted from the total, the remaining space should be theoretically fully occupied under normal conditions.

The nature of the railroad warehousing business makes this ideal condition impossible. There is generally a certain amount of waste space due to the partial delivery of block or bulk lot, or by failure of the lots received to fill entirely the space available at the moment. More goods arrive in "assortments." This means that the lot unit of goods, consisting of three or more varieties or sizes, must be stored and accounted for separately. In such cases special aisles must be provided in addition to the permanent aisles. In the case of "Individual Package Delivery," which is "assortment" service carried to the extreme limit, account must be

made for each individual package. Such service reduces the available space for bulk goods and the amount of reduction varies with different warehouses and with the volume of distribution business handled.

The handling of goods is a major operation in railroad warehouses. Goods are packed in a great variety of ways, in bags, cases, boxes, barrels, rolls, crates, ingots, and so forth. To handle such great variety of packages, requires adequate facilities. Attention must be given to the number and location of the appliances. Elevators and conveyors are used. Their location must be determined not only by requirements for economical handling but also by economical utilization of the available space. Other appliances include barrel elevators which are generally of the link-belt type and carry barrels and bags between floors, spiral chutes for descending freight, and pneumatic tubes to provide quick delivery of bills of lading and orders.

Services :

The service rendered by a railroad warehouse is similar to that rendered by a commercial warehouse. The difference between the two types of warehouses is in ownership, not in the kind of service rendered. For this reason, the commercial warehouse has opposed the railroad entry into the warehousing field. The service of the warehouse may be likened to that of a bank in which money in the form of goods circulates or is deposited for safekeeping, and held at the demand or draft of the depositor. Goods are stored by the manufacturer or shipper until the retailer or distributor needs them in order to supply the wants of the consumer. This storage service was the primary function of the warehouse before the war. Since the war, however, the position of the warehouseman has been materially changed, so much so, that today the warehouseman is really a distributor of goods, receiving them in carload lots from manufacturers and distributing them in less than carload shipments. The function of storage is relatively less prominent.

Generally there is a considerable difference between commodity carload and less than carload rates in general

merchandise. Commodities taking first class rating less than carload receive about third class rating in carload quantities. This offers an opportunity to the shipper to avail himself of the carload rates for a long haul to a certain distribution centre, using less than carload rates from that centre to consuming points. The situation is illustrated in a graphic way by the diagram below. Let A represent the point of origin, C the point of destination and B a point 1,000 miles from A and 100 miles from C.

A B C

The problem to be solved resolves itself into whether it will be advisable to ship less than carload direct from A to C or to forward this shipment with others as a part of a carload to a warehouse located at B where it will be forwarded less than carload to C. The latter method often results in a saving in rate sufficient to pay for all storage and handling cost without reference to the service which may be obtained in warehouse distribution. The following tables show the class rate and individual commodity rates from seven originating cities to several centres of consumption. (63) In all cases there is a saving in freight rates through the use of Chicago as a distributing centre.

Example 1. New York manufacturer desires to market his goods in Cedar Rapids, Iowa. By using Chicago as a distributing centre, his freight rates according to Table I will be:

Carload rate from New York to Chicago 94½ cents per 100 pounds
Less than carload rate from Chicago to
Cedar Rapids ... ... 79 ,, ,, ,, ,,
Total ... ... 173½ ,, ,, ,, ,,

By sending his goods directly from New York to Cedar Rapids the less than carload rate will be 190½ cents or 17 cents higher for each hundred pounds.

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(63) Data supplied by Mr. Youkel, Assistant to General Freight Agent, Pennsylvania System, Philadelphia, Pennsylvania March, 1930.

Example 2. A candy manufacturer in New York desires to market his candy in Madison, Wisconsin. By using Chicago as distributing centre, his freight rate according to Table 2 will be:

Carload rate from New York to Chicago $94\frac{1}{2}$ cents per 100 pounds
Less than carload rate from Chicago to

Madision, Wisconsin ... ... 51 ,, ,, ,, ,,

Total ... ... $145\frac{1}{2}$,, ,, ,, ,,

By sending his candy directly from New York to Madison, Wisconsin, the less than carload rate will be $155\frac{1}{2}$ cents or 10 cents higher for each hundred pounds.

Table 1. Freight Rates on Commodities Taking First Class in L. C. L. Quantities and Third Class in Carload Shipments. (cents per 100 lbs.)

From	Less than carload quantities to				Carload quantities to Chicago, Illinois.
	Cedar Rapids, Iowa.	Madison, Wis.	Rockford, Illinois.	DesMoines, Iowa.	
New York	190½	177½	159	214½	94½
Boston	190½	177½	159	214½	94½
Rochester	147	141½	116	171	66
New Orleans	241½	224	215	241½	151
Cincinnati	109½	125½	88½	133½	54
Chicago	74	60	53	91½	——

Table 2. Rates on Designated Commodities from given Cities in L. C. L. Quantities. (cents per 100 lbs.)

Commodity and point of shipment	Less than carload quantities to				Carload quantities to Chicago, Illinois.
	Cedar Rapids, Iowa.	Madison, Wis.	Rockford Illinois.	DesMoines, Iowa.	
CANDY:					
Chicago	64	51	45	73	
New York	164	155½	139½	182	94½
STEEL PRODUCTS, BOLTS and NUTS:					
Chicago	35	30	26½	41½	
New York	88	82½	74	98	56½
DRUGS IN BOXES:					
Chicago	79	60	53	91½	
New York	190½	177½	159	214½	94½
Cincinnati	109½	125½	88½	133½	54
SOAP:					
Chicago	35	30	26½	41½	
Boston	88	82½	74	98	56½
ICE CREAM FREEZERS: (SHEET IRON OR STEEL BOXES)					
Chicago	79	60	53	91½	
New York or Boston	190½	177½	159	214½	94½

The merchandise warehouse provides for spot distribution. So far as regards its raw materials, manufacturing has long depended upon commodity warehousing. Extension of the warehousing principle to its own output is a recent development of manufacturing. It solves the problem of accumulating spot stock at strategic marketing centres. To illustrate, when a manufacturer of denatured alcohol in Lawrenceburg, Indiana, is in competition with another manufacturer in Baltimore for business in Baltimore, the buyer in Baltimore is not likely to buy where he has to wait a week or more for delivery if he can get what he wants the same day. (64) A stock in a warehouse in Baltimore might be a deciding factor in securing desirable business. The manufacturer who operates a plant at Lawrenceburg, Indiana, ships his alcohol in carloads at carload rates to a warehouse at Baltimore. He mails written instructions to the war house indicating the distribution of the alcohol, which he desires to be made. The warehouse accepts delivery of the carload of approximately 80 drums of alcohol in each shipment. Generally it immediately distributes small lots of alcohol, one to ten drums, to each of the several of the manufacturer's customers in accordance with instructions, and then it put the balance of the carload of alcohol in storage. That is, the warehouse add the balance to the manufacturer's spot stock and store it awaiting further orders for distribution to be given by the manufacturer. Eventually the warehouse distributes the alcohol in small lots in Baltimore, possibly shipping some of it by truck to nearby points, in less than carload lots by railroad and by express to points outside Baltimore, all in conformity with the manufacturer's instructions.

The manufacturer will keep shipping that alcohol to the warehouse in carloads, at carload rates, in order to keep a sufficient quantity of it en route and in storage to supply quickly the orders of his customers. In fact, one of his customers can telegraph an order for one drum of alcohol to the manufacturer in the morning and obtain delivery of his order from the spot stock

(64) This example is taken from an actual case in a Baltimore warehouse: The Terminal Warehouse Company.

in the warehouse on the afternoon of the same day. Thus by employing a merchandise warehouse in Baltimore, the manufacturing plant located approximately 600 miles west of Baltimore, can compete with a manufacturing plant in Baltimore, in selling goods to customers in Baltimore and can give equally prompt delivery service.

The warehouse on written instruction from the manufacturer, by trucking or shipping by railroad has the empty alcohol drums returned to the warehouse, such drums then are stored there until a full carload of the empty drums is assembled in the warehouse. Then the warehouse ships the carload of empty drums at carload rates to the manufacturer at Lawrenceburg. The warehouse performs that service under continuing contract and arrangement with the manufacturer by which he relies upon the warehouse in carrying on his business. This is a typical example of the service and contractual arrangement of the merchandise warehouse. It is a service link between the producer and the consumer.

Another illustration. (65) A daily newspaper may require every thirty days a supply of paper amounting to fifty carloads or more. It contracts for this material for several months or a year ahead from paper mills in the northern part of the State of New York or in Canada, to be shipped in lots of a certain number of carloads at carload rates each month to a designated local warehouse. The newspaper also contracts with the warehouse to receive the carloads of paper and to deliver it in truck loads to the newspaper plant in response to its telephone orders. Generally the newspaper plants are in business districts of cities where high rents restrain them from storing thirty days' supply of paper on their own premises and the nature of the business requires that a large supply of paper be kept in hand. To this end the merchandise warehouse fulfil an useful function. Example of this nature may be multiplied almost indefinitly. The following list of customers taken from a railroad warehouse at Philadelphia will serve to indicate the extent of distribution service offered by the merchandise warehouse :

(65) This example is that of a Baltimore paper: The Baltimore Sun.

List of Prominent Business Concerns that use the Merchandise Warehouse Distribution Service, and are afforded that Service by the Merchants Warehouse Company at Philadelphia.

Name of Concerns	Point of Shipment	Commodity
Morton Salt Co.	Port Huron, Mich.	Salt
Worcester Salt Co.	Silver Spring, N.Y. & Ecorse, Mich.	Salt
Vacum Oil Co.	Bayonne, N. J.	Oil
Williamsport Wire Rope Co.	Williamsport. Pa.	Wire
Rossville Co.	Shelbyville, Ind.	Alcohol
Sterling Product Co.	Cambridge, Mass.	Soap
Cudahy Packing Co.	Chicago, Ill.	Soap
O'Scullivan Rubber Co.	New York, N.Y.	Rubber Products
John B. Astell & Co.	Reading, Pa. Pittsburgh, Pa. Allenport, Pa.	Boiler Tubes
Climalene Co.	Canton, O.	Cleaners
Campbell Soup Co.	Philadelphia, Pa.	Canned Soup
Certain-Teed Products Co.	Philadelphia, Pa.	Floor Covering
Richardson & Boynton Co.	Dover, New J.	Heater
L. H. Parke Co.	Import thru N.Y.	Coffee
Daily News Co.	E. Millincocket, Me.	Newsprint
Eppins-Smith Co.	Santo, Brazil	Coffee
H. G. Hanline	Cleveland, O. Newburgh, N.J.	Steel Strapping
Fairbank Morse Co.	Chicago, Ill.	Scales
Perfection Stove Co.	Cleveland, O.	Oil Stoves
Hygienic Products Co.	New York, N.Y.	'Sani-flush'
J. B. Ford Co.	Wyandotte, Mich.	Soda Ash
Bon Ami Co.	Manchester, Conn.	Soap Products
Sherwin Williams Co.	Cleveland, O.	Paints
Quaker Oats Co.	Buffalo, N.Y. ST. Louis, Mo.	Cereals

Pool car distribution is another important service offered by the warehouse. When a number of small shipments are sent to merchants of the same city or nearby cities, the entire consignment may be consolidated into a carload unit and consigned to the warehouse. The service performed by the warehouse in pool car distribution is the same as that in connection with merchandise distribution except that in pool car distribution the goods generally do not go into storage, being

distributed to the various merchants indicated immediately upon arrival of the car at the warehouse. (66) The cars are known as "pool cars" because the shipments in them are pooled or brought together for transportation under carload service and carload rates.

Besides economy in rate, there are other factors to be considered, Carload shipments are moved by the railroad in the shortest period of time, and they are not disturbed from the time they leave the manufacturer's plant to the time they arrive at the warehouse for distribution. Less than carload shipments are subjected to considerable handling at transfer points and consequently bear greater risk of loss and damage.

An increasing number of railroad warehouses are equipped with complete private offices and store rooms to lease to manufacturer's sales agents. As most of the warehouses of this type are centrally situated, it offers the sales agent the advantage of convenient location, direct transportation facilities and close contract with the stock of merchandise carried in the warehouse. A display room adjacent to the office will be furnished if desired so that the manufacturer may hold demonstrations for prospective customers in the same building in which the stock is carried The Terminal Commerce Building, built by the Reading Railroad in Philadelphia is a warehouse in which all factors of distribution are combined, including office, sales display room, warehouse, shipping and garage. Rental charges vary with the service facilities available in different warehouses and with the location of the space in the warehouse. In general the rate ranges from fifty to sixty cents per square foot per annum for a large block of 5,000 square feet or over to one dollar or more for small units.

Through the use of negotiable receipts the warehouse assists in financing. The goods which when merged in the general inventory are dead value as far as borrowing is concerned, may be converted into a basis for loans through the means of public

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(66) Pool car distribution service is advertised by railroad subsidiary warehouses, ef. advertisement of The Western Warehousing Co., a subsidiary of the Pennsylvania System, inserted in Illinois Journal of Commerce, March. 1930. pp. 22-23.

warehousing. Early in 1921 the Ford Company attempted to renew or extend the sum of $35,000,000 short term notes. (67) The conditions named by a banking syndicate for renewal of loans were regarded by the borrower as unreasonable, even confiscatory. Although his credit was beyond question, the sum was so huge that it was impossible to borrow by ordinary means from a single bank or group of banks except on the terms stipulated by syndicate.

Through the use of public warehousing Ford was able to secure the financial assistance which his banker had failed to provide. Cars and tractors with repair and replacement parts were shipped thirty-five branches and eight hundred agencies and sub-agencies. Each of these was instructed to warehouse the goods upon arrival, storing them with a public warehouseman in his locality. Then using the warehouse receipts as collateral, loans were made from local banks. With the proceeds from thousands of scatter loans, the emergency was readily bridged over.

In addition to the above services, the warehouse carries unclaimed freight, paying the freight charges and holding it until consignee is found or goods are sold for charges. It conducts a pick-up and delivery service for merchandise freight in connection with its trucking service. It makes store door deliveries and transports goods nearly as expeditiously as do express companies. The well organized and regularly operated trucking service of the merchandise warehouse supplies the needs of smaller concerns at lower trucking costs.

To sum up, distribution of carload freight by a merchandise warehouse is an extensive task, when one brings to mind all the services that attend distribution, which include a continuing arrangement to deliver by motor truck, express or railroad to points within a distribution territory, and all the correspondence, reports, accounting, acknowledgements and billing, that accompany their operation.

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(67) H. A. Haring: How Factory can be Financed by Warehouse Stock, Distribution & Warehousing, March 1926.

RATES AND CHARGES:

The rates published by railroad warehouses are of two kinds, storage rates and handling rates. The storage rates is based on the 'floor load' system which has for its basis the principle that other things being equal, the return from any given area of warehouse space should always be the same, regardless of the commodity to be stored. (68) The problem of rate-making is to determine the relative weight of various commodities that can be piled in a given unit of space, for example, a square foot. The number of pounds of a commodity which can be economically piled on one square foot of space is called the 'floor load' of that commodity.

To find the floor load, it is necessary to start with certain fundamental factors. It is assumed that there is a limit weight that a floor will carry and that there is also a limit height to which goods may be piled. The floor carrying capacity of most railroad warehouses is 250 pounds per square foot, and this limit has been recognized by the warehousing world as the standard unit. The height of the pile is another limitation, and this is determined by the space between floors. In most warehouses the clearance between floors is 10 feet, except on the first floor which is largely used for receiving and shipping purposes. The entire ten feet cannot be used for piling, because room must be left for sprinkler heads and for spreading covers in case of fire. A matter of 20 inches is considered a fair allowance for the spread of covers in case of fire. This necessarily reduces the maximum theoretical height of pile from ten feet to $8\frac{1}{3}$ feet, and consequently the two factors upon which the floor load system is built are a maximum carrying capacity of 250 pounds per square foot and a maximum height of pile of $8\frac{1}{3}$ feet.

Generally speaking, there are two types of commodities, high density and low density. When a commodity produces a floor load of 250 pounds per square foot, whether piled to $8\frac{1}{3}$ feet or not, it is a high density, otherwise it is a low density commodity.

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(68) For modification of this general rule, see p. 57 infra.

As a warehouseman is selling space for storage, it stands to reason that any rate per hundred pounds as against a commodity providing a floor load of 125 pounds must be double the rate per hundred pounds of a commodity producing a floor load of 250 pounds in order to arrive at the same earning per square foot. Hence for storage purpose, commodities are calasified according to their density. High density commodities bear a relatively lower rate because it is possible to pile more weight of such commodities in a relatively small space. The reverse is true with low density commodities.

There is some modification to this general rule. It is evident that it is impossible to store goods without there being a certain amount of space lost as between the packages in the pile and that the amount of space which is lost must vary with the particular types of packages. In the case of a rigid rectangular package, such as a case, a paper container, or a barrel, the warehouseman ought to be able to store with a minimum loss of space. In the case of bags and bales, the space lost in piling is greater. Bales come in all shapes and sizes and sometimes are practically impossible of measurement. Bags will vary in pile as to size and rigidity. In storage classification, consideration is given to the types of packages, a certain percentage is added to the volume of the package in order to compensate the loss of space as the package rests in the pile.

When the volume of the package and the amount of lost space are known, the next step is to ascertain the density of the package by dividing its weight by the volume in the pile. Having found out the density, the next step is to multiply that figure by the maximum height to which the goods can be practically piled in the warehouse. This does not mean necessarily the full eight and one-third feet. It means, as high as they can be practically piled, either because of dimensions of the package or because of the nature of the goods. The final result of these computations is the 'Floor load', the weight per square foot on the commodity as it rests in the pile.

The earning power of the warehouse is limited by the extent of its floor area. As a rule each warehouse has a predetermined

base rate per each square foot of its floor; in New York the average rate is 10 cents per square foot per month. When the 'floor load' of a commodity and the base rate of a warehouse are known, the storage rate per pound per month is obtained by dividing the base rate by the 'floor load'; for example, the 'floor load' of cassia in rolls is 100, that is, 100 pounds can be stored in one square foot of space. (69) If then the warehouseman's predetermined base rate per square foot is 10 cents per month, he would be storing 100 pounds of cassia for 10 cents, or at the rate of 10/100 cent per pound, which becomes ten cents per hundred pounds. This process of calculations is generally avoided by use of properly calculated tables and tariffs. The above explanation is given to show the process of calculations behind a warehouse tariff. (70)

So far the rate considered is for bulk storage. If the warehouseman were faced merely with the problem of storing large quantity of goods in bulk or of single classes or varieties, the problem would be simpler, but unfortunately such is not the case. Commodities very often come to the warehouseman in a greater or less condition of assortment as to marks, sizes or varieties. It must be patent that when goods come in such condition, a certain amount space in the warehouse must be lost in the proper storage of those goods so as to make it possible to get at the sizes or variety for delivery. It is necessary to take some arbitrary stand as to the number of marks, sizes or varieties which may be allowable to the carlot quantity in storage. As a general rule, no additional charge is made when the carload is separated into four or less, (71) which in trade parlance is known as carload of minimum assortment. When the carload is separated into five or more lots, it is known as carload of maximum assortment, and an additional charge is made.

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(69) American Warehousemen's Association: Warehousing General Merchandise, an Encyclopaedia, p.44 (1923).

(70) For a typical railroad warehouse tariff, see, Baltimore and Ohio Stores, Inc.: Rates of Storage and Labor, published by Edwin Morton, 26th St. & 11th Ave. New York City.

(71) 148 I. C. C. 299, 302.

While a great variety of conditions may obtain in the storing of goods in warehouses under these two general classes, it may be said that when goods are stored with only a few sizes or marks a side aisle which is necessary to get at them does not necessarily have to be carried clear through to the back wall. Part of the goods can be piled on either side and part of them can be piled at the back. This is not true in case of maximum assortment where the aisle must be carried clear through to the back wall, and where the aisle must be large enough to admit the passage of the largest size package. The warehouseman, then, in fixing the storage rate must first determine a basic rate for bulk storage, with an advance on that rate when the commodity is stored in maximum assortment.

In addition there are other factors to be considered. These factors vary between different warehouses, different localities and different packages of the same commodity. For example, cotton may be absolutely forbidden storage by the underwriters in one part of the country and unrestrictedly welcomed in another; copper in ten pound ingots is very liable to claims for losses and in 250 pounds it is not. (72) The general factors modifying storage rates are excess value, fragility, liability to claims, small volume, likelihood of attracting vermin, malordor, production of dust, fire risk and messy conditions.

The factors affecting rates for handling are the types of packages and their weight and density. Respecting types of packages, there are two groups: the first group consists of bags, cartons, cases, crates and metal ingots; the second group consists of bales, bundles, cooperage, pails, rolls and tubs. The first group of packages bears a relatively lower rate than the second group. While there is a difference in cost between the two groups, there is little difference in cost between the types in a given group. (73) Handling charges for a given type of packages are based on weight and density. They cover only the ordinary labor and duties incidental to receiving goods at warehouse

(72) Warehousing General Merchandise, op. cit.: p.297.

(73) Illinois Warehousemen Association Tariff No. 9.

platforms, stowing and delivery back to tail gates of wagons or to railroad car doors, and do not include loading or unloading of wagons. Additional charge is made for weighing sampling, coopering and for skilled and clerical labor. Duplicate reports of weights are furnished without charge if requested before the original is made. If furnished subsequently there is an additional charge. If the goods must be taken down and repiled for weighing, inspection, sampling, gauging, labelling, etc., at the request of the owner, the actual time consumed is charged for at the labor rate specified by the warehouse. As a rule the railroad warehouse does not carry advances for customers or make loans on goods in its possession. Cash charges on goods are payable on demand and are subject to sight draft. Interest on advances is charged at ½ per cent per month or part thereof, and this is in addition to bank collection charges when draft is necessary. (74) As for insurance charges, the law specifies that the warehousemen are not insurers of goods. (75) Insurance charges are additional to the regular storage charge. There is a slight movement to include insurance, by a charge for it; that is, to give an insured warehouse receipt. This is practically an adding together of two services, storage and insurance, so as to combine the price of two services in one charge.

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(74) Baltimore and Ohio Stores, New York: Rates on Storage & Labor, op. cit pp. 5-6.

(75) Lloyd vs. Haugh 223 Pa 148.

CHAPTER III

COLD STORAGE

In the development of traffic it is of prime importance that all commodities transported shall be delivered at points of destination or consumption in as nearly perfect condition as practicable. To this end the carriage of perishables requires equipment of a specialized nature. This is because of the delicate character of such goods, of the special and varied protection which they require and of the great variety of products which they comprize. In some, such as meat, there is a regular traffic; in others, such as fruits and vegetables, there is a seasonal traffic. In the case of butter and eggs, concentration and reconsignment facilities are necessary; and in the case of fresh milk, immediate dispatch is essential. To meet the marketing requirements of the great variety of perishable products, produce terminals and cold storage are necessary.

Direct trading with the producer is impossible to any considerable extent, because of the geographical remoteness of both producers and consumers and because of the large scale output of the producer as contrasted with the small unit of purchase of the consumer. The small unit of purchase and the wide variety of buying on the part of the ultimate consumers make it necessary for the jobber to carry stocks composed of a large variety of small units. This in turn makes it desirable to have a wholesale market and produce terminal. The market organization of a modern city is a well-planned system of specialized facilities.

The nature of the traffic it handles determines to a large extent the need of a produce terminal. Certain foodstuffs are handled along with other merchandise as package freight; others can be distributed only through specialized channels. In the first group may be classed a large portion of the processed groceries, canned goods, dried fruits, prepared cereals and the like. These are handled at general pier stations along with ordinary package freight and do not require the facilities of cold storage. In the case of perishables, such as fruits and vegetables, butter and eggs, dressed poultry and the like. The need for cold storage is

evident. The great variety of sizes, grades and qualities means that a large space must be provided for display and inspection at the receiving terminal. There must be room provided for the produce traders for bargaining, and for consolidating their sales and purchases. These requirements explain the close relation between cold storage and produce terminals.

Terminal cold storage acts as a reservoir which absorbs the surplus supply of semi-perishable commodities. It provides the urban population with a normal supply of seasonally produced commodities during periods of deficient production at lower prices than would prevail if no reserve stock were available. In this respect it has resulted in far-reaching benefit to society. The consumption of fresh fruits is conceded by the best authorities to be an important aid in promoting health, and cold storage has enabled fruit growers to place at the disposal of the general public throughout the year an abundant supply of nutritious food in great variety. The handling of bananas may serve as an example. The banana is imported in large quantities in unripened condition in steamships provided with refrigerating facilities. On reaching its destination it is transferred to cold storage warehouses where it is held indefinitely in its unripened condition until required by the market or it is shipped in carload lots in refrigerator cars to other points. Sometimes the entire carload is transferred at its final destination to large cold storage warehouses specially designed for this kind of business. When a demand is anticipated the fruit is transferred to a more moderate temperature and gradually ripened for the consumer.

DEVELOPMENT OF TERMINAL COLD STORAGE:

Prior to 1890 cold storage warehousing was carried on in a very limited way, by using natural ice mostly as refrigerant, with the admixture of salt where freezing was to be done. (1) The

(1) See J. C. Grossman: History of Refrigeration, a series of articles appeared in Ice and Refrigeration, 1924-25. Materials on the development of cold storage are fragmentary. The first survey of the industry was made by Department of Commerce in 1903, under the title, "The Warehousing Industry." See also E. A. Duddy: The Cold Storage Industry in U. S. (Chicago University Press, 1929) pp. 3-8 for original sources.

railroad did not enter the field until recent years. (2) Although the first refrigerator car had its origin as far back as 1868 when fruit was transported partly iced, refrigeration in transit was largely in an experimental stage. (3) Cold storage at terminal points was carried on by private interest and it started as a branch of the merchandise warehouse and was given a place in any part of the building that happened to be vacant. Insulation was provided in a crude manner. Insulating materials consisting usually of sawdust, shavings, wood and specially prepared insulating paper, were used, and much attention given to air spaces. The temperature obtainable with ice alone could not be reduced much below 38 degrees Fahrenheit which for long storage periods proved entirely inadequate. The ice melted rapidly and had to be replenished frequently to keep the bunkers filled and to maintain the low level of temperature. Insufficient insulating methods together with lack of mechanical refrigeration on a large scale retarded the progress of the cold storage industry.

The introduction of mechanical refrigeration marked a new day in the cold storage industry, and the modern development of the business began when refrigerating machines were installed in warehouses in a little more than thirty years ago. (4) Coincident with the improvement and the economical adaptation of refrigerating machinery to the cold storage industry, came the demand for better construction of the warehouses. Instead of using old buildings, large terminal plants were erected with better insulation and adequate facilities for the handling of perishable products. Arrangements were made with the railroads for the handling of the railroad perishable traffic at terminal points, (5)

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(2) See table on p. 76 infra.

(3) The Railway Gazette: Vol 40, No. 8, p. 186 New York, February 23, 1906. Also, L. D. H. Weld: Private Freight Cars and American Railways, pp. 11-16.

(4) See Department of Commerce: Warehousing Industry of U. S op. cit. pp. 1046-49.

(5) For an example of such contract arrangement see Appendix IIa p. 235.

so that with refrigerator car service, perishable foods could be carried under constant refrigeration from producer to consumer. The development of terminal cold storage plants is reflected in the following figures:

Refrigerated Space in Terminal Public Cold Storage Plants. (6)
(Space in Cubic Feet)

City	1922	1925	1927	1529 (7)
Baltimore	1,782,849	1,403,500	1,406,000	2,992,560
Boston	10,239,688	10,275,883	9,762,550	9,678,984
Buffalo	4,253,922	3,170,157	3,729,736	4,493,659
Chicago	35,121,577	43,106,181	34,113,221	35,875,150
Cleveland	6,432,000	5,617,813	6,286,671	10,911,653
Denver		1,005,200	1,205,200	
Fort Worth	529,243	1,897,910	2,358,914	2,682,684
New York	34,555,424	33,478,729	40,123,555	39,856,555
Kansas City	5,051,795	5,555,000	4,702,394	4,678,585
Los Angeles		4,302,553	7,066,550	6,917,706
Minneapolis		2,615,189	2,804,170	2,972,684
New Orleans		1,600,000	1,756,324	
Philadelphia	6,459,171	6,546,329	8,210,186	11,791,537
St. Louis	3,040,380	7,941,269	8,759,917	10,197,417
San Francisco	4,237,398	5,078,341	4,708,252	4,931,767
Seattle	2,911,884	3,482,865	3,790,220	6,107,522

Until the advent of the system of produce terminals during the last few years, the railroads did not directly engage in the cold storage business. Produce and other perishable freights were handled through contract cold storage warehouse; thus in Philadelphia the Pennsylvania Railroad handled produce through the 30th Street Station, and the Baltimore and Ohio Railroad at Piers 22 and 62 through their respective contract concerns. This system did not offer adequate facilities to encourage the perishable traffic. Writing in 1917, a specialist commented on the situation as follows: (8)

(6) Based on Cold Storage Statistics of Department of Agriculture, Statistical Bulletins No. 1, No. 13 and No. 26.

(7) Figures from Cold Storage Report Division of Department of Agriculture.

(8) G. C. White, specialist in Charge of Transportation, Department of Agriculture, in a letter to the Editor of Railway Gazette, appeared in Railway Gazette, Dec. 21st, 1917, p. 1116.

"Cars are not the places where they (perishables) should be stored. But they will have to continue to be stored in cars until other storage space is available. It has for sometime been evident to close students of the problem of intra-city distribution of foodstuffs that other storage space to be provided in each city in connection with joint wholesale perishable terminals to which all the rail roads are called upon to take in bringing about conditions of this kind is to merge their competitive activities with respect to terminal delivery and to agree to use a common neutral terminal."

"Until that point is reached in the provisioning of our large cities, little headway will be made in securing by moral suasion the co-operation of shippers and receivers in the more efficient use of cars by releasing them promptly at terminal markets. A perishable terminal equipped with ample storage space, common and cold, will permit cars to be unloaded as soon as they reached the market, and to be returned to points of production."

The railroads were aware of the need for produce terminals to relieve traffic congestion as well as to develop the perishable freight. During the war, however, the operation of the railroads was placed in the hand of the government and there was no incentive for traffic development. Immediately after the war the problems in relation to the return of the railroads to private ownership was all important and so the building of produce terminals by railroads did not begin until 1923. In New York the Erie piers at Duane Street were converted into a perishable terminal in 1923, and the Pennsylvania Terminal at Piers 27-29, East River, was greatly enlarged in 1927 devoting nine acres to fruits and vegetables. (9) The New Chicago Terminal Market was built in 1926 under the joint ownership of the Atchinson Topeka & Santa Fe and the Illinois Central. The Philadelphia Perishable Produce Terminal and the Pennsylvania Produce Terminal at Philadelphia were built in 1927. All these activities came within the period of the last seven years and are indications that the railroad entry into direct operation of terminal cold storage is of recent origin.

Railroad as Cold Storage Warehouseman :

The railroad enters the cold storage field in much the same

(9) Pennsylvania Railroad: Produce Terminal in New York City, 1927.

manner as it does the merchandise warehousing, that is, through contract arrangement, leasing agreement and subsidiary operation.

Regarding contract arrangement, the terms of the contract parallel to a great extent the terms in the merchandise warehouse contract. This is illustrated by the agreement between the Pennsylvania Railroad and the Quaker City Cold Storage Company, by which the parties agree as follows : (10)

1. That the railroad shall publish in its tariff that the cold storage company is a point of delivery to which butter, eggs, dressed poultry and cheese may be consigned.

2. The railroad will shift cars containing these commodities to the plant of the cold storage company for unloading without cost.

3. The cold storage company acts as agent for the railroad in unloading cars, promptly notifying consignees of arrival, delivering to consignees and collecting freight charges, allowing free time to consignee as provided for in public tariffs of the railroad company. Beyond the free time period the cold storage company shall have the right to charge consignees for storage of any freight held beyond the free time period, or for any service rendered or facilities furnished by it, at customary rate.

4. The cold storage company agrees to indemnify and hold harmless the railroad for all damage to or loss of freight while in its custody or control and all liability by reason thereof after delivery by the railroad to the cold storage company; and in order to properly protect the railroad in this respect the cold storage company agrees to furnish a bond under conditions prescribed by the treasurer of the railroad.

5. The cold storage company agrees to provide to the best of its ability sufficient space to accomodate the traffic, which will arrive currently under the agreement, and to give preference under

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(10) Letter from J. L. Eysmans, v ce president, P. R. R. to Horace P. Serrill, president, Quaker City Cold Storage Co., dated Aug. 9, 1922; and also reply by H. P. Serrill dated Philadelphia August 15, 1922. See Appendix. IIa, p. 285 infra.

the agreement to traffic, tendered for delivery by the railroad company. The cold storage company agrees to use its best endeavors and influence to route freight over the railroad.

6. The agreement may be terminated on thirty days' written notice by either party with sufficient grace to allow the railroad to issue necessary changes in tariffs.

7. The effective date of arrangement begins with the date the published tariff authorizing the allowances becomes effective.

Such are in brief the terms of the contract. The economic, effects and the legality of such arrangement, present the same situation as in the case of the merchandise warehouse. In fact, the contractual relation between the railroad and the cold storage warehouse has been made a part of the general proceedings against contract warehouses. (11)

The leasing agreement between the railroad and the cold storage company, is governed by the same practice as in the case of the merchandise warehouse, which has been explained in the last chapter. (12) Consequently the present chapter will be devoted to the methods of cold storage operation by the railroad through its subsidiary.

The subsidiary through which the railroad operates cold storage takes the form of the produce terminal. A produce terminal is a specialized terminal facility designed specially for the purpose of handling and storage of perishable freight. It is not a direct producer of revenue, except through the rental from the auction rooms, storage space and other concessions in the terminal. The owning railroad expects to recoup its expenses in operation and maintenance through increase in freight revenue from additional perishable freight. With virtual complete concentration of regulative power over rates in the hand of federal authority,

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(11) Gallagher et al vs. P. R. R., I. C. C. Docket 20968. To avoid repetition, the reader is referred to the preceeding chapter for an analysis of the operating results and the legal points involved in such contract arrangement.

(12) See supra pp. 36-42. 32-38

railroad competition in rates has largely been replaced by competition in service. For this reason there is a great rivalry between the railroads to provide produce terminals in order to attract the perishable traffic. In 1926 the Baltimore and Ohio Railroad opened a four-million-dollar produce terminal in Philadelphia, and six months later the Pennsylvania Railroad opened another terminal at the cost of ten million dollars in the same city. In Detroit no sooner had the Union Produce Terminal [13] been completed at the cost of five million dollars, than the Michigan Central Railroad opened an individual and competing modernized produce terminal at an investment of $1,800,000. The objection to such rivalry lies in the fact that the owning railroad often refuses its competing line to use the same facilities resulting in competitive duplication and increased overhead costs. The present status of the produce terminals is indicated in the following tables: [14]

Modern Produce Terminals owned and operated by Railroads.

Location	Terminals	Rail Ownership	Date opened
Baltimore	B. & O. Produce Terminal	Baltimore & Ohio	1929
Boston	Fruit & Vegetable Auction Terminal	Boston & Maine	1927
Buffalo	Buffalo Produce Terminal	Nickle Plate & Erie	1929
	N. Y. Central Terminal	N. Y. Central	1929
Chicago	Potato Terminal	Chicago & N.W.	
	Chicago Produce Terminal	Atchison, T. & S.F. and Illinois Central	1927
Cleveland	Northern Ohio Terminal	Nickle Plate	1929
Detroit	M.C. Produce Terminal	Michigan Central	1927
	Union Produce Terminal	Wabash, Pere Marquette, P. R. R.	1929

(13) Controlled by Wabash, Pere, Marquette, and the Pennsylvania RR.

(14) Data secured from questionaire. See Appendix IV, p. ~~250~~ 227 infra.

Location	Terminals	Rail Ownership	Date opened
Fort Wayne	Produce Terminal	P. R. R.	
Los Angeles	Wholesale Produce Terminal	Atchison, T. & S. F.	1928
	Produce Terminal	Southern Pacific and Union Pacific	
New Orleans	I. C. Produce Terminal	Illinois Central	
New York City	Pier 27-29 North Pier	P. R. R.	1927
	Manhattan Yard, Jersey, City	P. R. R.	1927
	Seaboard Terminal Jersey City	Erie	1927
Philadelphia	Perishable Produce Terminal	B. & O. and Reading	1926
	Penn. Produce Terminal	P. R. R.	1927
Pittsburgh	Fruit Auction Terminal	P. R. R.	1927
St. Louis	Fruit Auction House	Wabash	

TERMINAL FACILITIES:

The facilities of the produce terminal are based upon local needs and conditions. Where the terminal is built, in a unit, such as the Philadelphia Perishable Produce Terminal, it embodies the latest design and economy and convenience. Where the terminal is an enlargement from an old structure, such as the Pennsylvania Perishable Terminal, New York, adjustments must be made with the existing conditions. In general, a produce terminal comprises four units; a cold storage unit with ventilated and refrigerated storage space, a public auction unit for the auctioning of fruits and vegetables, a display unit for display of such produce and a team delivery yard for making direct delivery.

All railroad cold storage houses are of the multi-story type with refrigerated storage space of varying capacity. The building is generally of concrete construction with flat slab type floors and roofs, and rests on a foundation ot reinforced concrete mat supported on piles. The first floor is usually occupied by offices,

engine rooms and receiving and shipping departments. The basement is generally used for dry storage and repair shops, while the upper floors are used for cold storage. Insulation and refrigeration requirements largely determine the place and construction of the plant. The walls as well as the floors are insulated with an envelope of cork and in some cases the cork is carried up the interior columns to a height of several feet. Cork is also used to form the partitions between the rooms in the various floors and entirely insulates the stair-walls and the elevator and pipe shafts.

In designing the insulation for different warehouse, the thickness of the layer of cork is determined by a study of the temperature to be used in different rooms, and by the severity of the exposure of the exterior walls to the elements. In consequence the insulation ranges from five to eight inches thick. In a further effort to prevent transmission of temperature, some floors are constructed without connection with the exterior wall and the vertical shafts, except for anchor rods at the side wall columns. In place of the usual floor-wall connection, the cork is carried down between the walls and the floors; and the joint is sealed with a bituminous mixture to prevent passage of air or moisture between floors.

Different types of perishables require different temperature. Consequently it is necessary to keep different floors at different floors at different temperatures. Some floors are designated as "cooler" storage, others as "freezer" storage. Where necessity arises the temperature can be so regulated that a cooler storage room can be turned into freezer storage, and vice versa.

The system of refrigeration is designed to keep the produce at a constant temperature; to absorb the surplus heat of produce and to keep it from taking additional heat. The system in use at Pennsylvania Produce Terminal, Philadelphia, consists of four ammonia compressors so arranged as to permit great flexibility and economy in operation; eight horizontal shell, multi-tube ammonia condensers; three brine coolers so inter-connected they can be used interchangeably for either high or low temperature brine; four centrifugal pumps and the usual arrangement of

controls, traps and other miscellaneous apparatus. Most warehouses adopt the Moore system of ventilation and humidity control, whereby the most favorable conditions are obtained automatically for maintaining freshness and quality in produce and fruit.

Speedy handling and quick disposal are essential in the reception and distribution of perishables. Hence auction rooms are provided at produce terminals to expedite transactions. The number of auction rooms varies with the size of the terminal. The general arrangement of the rooms is such as to facilitate the transaction of business. The floor slopes toward the front, where an elevated rostrum is provided for the use of the auctioneer and clerk. Each seat in the room is provided with a desk, inkwell and paper rack for the convenience of buyers. In some cases the walls and ceilings are finished with asbestos absorbent plaster to improve acoustic qualities.

Display rooms form an important feature of the produce terminal and vary in capacity from 150 cars [15] to 725 cars. [16] The produce intended for the display and salesrooms is unloaded during the night, while daytime is occupied by the display, sale and delivery of the produce from the terminal. Each night, the agent advises the yard crews of the assignment of each car received, and from that time on through the night the cars are spotted at their proper places and all the produce entering the terminal is unloaded and arranged for display. In the early morning everything is in readiness for the sales of the day, and buyers are permitted on the floors to inspect the produce. The major part of transactions in auction and private sales is made in the early morning, and immediately following the fruit, vegetables and dairy products are removed in trucks by the purchasers. After the morning rush, it is comparatively quiet, and through these quieter hours of the day the display floors are swept and put in condition for receiving the produce of the following night.

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(15) Philadelphia Perishable Produce Terminal, Philadelphia, Pa.

(16) Pennsylvania Produce Terminal, New York City, N. Y.

Thus the produce handled at the terminal is received, displayed, sold and delivered on the same day.

To make possible speedy delivery of carlots to buyers, yard and track facilities are provided. These make possible a constant flow of delivery from refrigerated cars to delivery wagons and trucks. The best example of the yard and track facilities is found in the New Chicago Produce Terminal where the yard facilities are divided into four sections: (1) a receiving yard with a capacity of 625 cars which is used for breaking up of inbound trains; (2) a delivery yard in front of the auction house having a capacity of 410 cars; (3) an inspection yard holding 365 cars to which cars awaiting further orders from the consignees are held for inspection; and (4) a yard for reconsignment and diversion purposes holding 425 cars.

Some terminals are equipped to pre-cool produce. The Chicago Terminal, for example, has pre-cooling facilities having capacity to ice 34 cars at a time. There are two distinct systems: the "Guy System" and the "Intermittant Vacuum System". The first named provides a continuous direct draft of cold air with forced circulation between the packages and contents of the car. The second is an intermittent system by which a draft of cold air is forced into the car by fans causing as high pressure as the loose construction of the car will permit, followed by a period of pumping out so as to produce partial vacuum.

SERVICES:

Improvements in the handling of perishable traffic have been one of the outstanding developments in recent years. They enable shippers to reach markets hitherto closed to them, and have resulted in opening new farming territory that would otherwise be planted in less profitable crops, owing to lack of outlet for its products. To dress meats or to grow produce in excess of current needs formerly meant to waste the surplus, a situation that was completely changed by the oncoming of cold storage. Today Chicago packing products are consumed in Europe, and California citrus fruits find a market in Maine. In this phase of marketing development, the produce terminals play no mean part with its

storage, inspection, auctioning, reconsignment, and diversion, financing and other marketing services.

Cold storage is an exact science. A variation of a few degrees of temperature or a small percentage of moisture may ruin produce or impair its quality. Ventilation is necessary; for if the exhalations from the produce are not withdrawn decay is the result. Fruit may be considered as a living organism which has a definite span of existence, the length of the span depending upon the conditions surrounding it. (17) When fruit is removed from the parent plant the life processes constituting ripening are materially hastened and the life span is greatly shortened if the fruit is allowed to remain warm for any considerable length of time. According to various experiments, different temperature must be maintained for different products so that the goods which would be injured by freezing are merely chilled, while others are placed in low temperatures. Heater service also comes into play during winter months to prevent freezing.

In its capacity as a cold storage warehouseman, the terminal is supposed to supply a uniform temperature of desired degree of cold through its rooms during the storage period. It is expected to be managed in such way so that the deterioration of the fruit and losses from any other causes may not be reasonably attributed to a poor construction or installation of the plant or to its negligent or improper management. The terminal holds the produce in storage as a trustee for the storer, and in this relation is bound to exercise only that degree of care and diligence in the management of the building and its contents that a man of ordinary care and prudence would exercise under the circumstance in protecting the plant and the goods if they were his private property. (18)

In connection with the cold storage service, inspection is

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(17) Plank, R.: Research Work on Cold Storage of Fruits and Vegetables Monthly Bulletin of Institut international du froid, English edition, Nov. 1927.

(18) Hardman vs. Montana U.R. Co., 83 Fed 88: White vs. Col. C. R. Co., 101 U. S. 98.

provided at terminals for perishable commodities. The purpose of this inspection is to determine the exact condition of perishables transported and to collect and disseminate information as to the causes of damage and to prevent losses to perishable shipments. For the protection of the railroad a detailed inspection of the shipment is made at the shipping point. The inspection includes the arrangement and condition of the load, as well as the condition of the commodity; and covers such matter, for example, as salty floors, collapsed bunkers, improperly fitted doors, and any other car faults might affect the condition of the commodity transported, as well as stowing and bracing, and the strength and condition of the containers used: A notation is made as to the presence or absence of false floor, and the size and character of any additional protection given, such as the use of paper on the floor, sides and ends of the car to guard against freezing. In describing the condition of the perishable commodity, note is made as to the variety, quality, color, size, pack and condition. Quality and color are classified as good, fair, only fair, poor etc; and size, as large, medium, small, very small, etc. The condition of the pack is based on the height of the cover of the container over the contents and is described as high medium, flat or slack. Degrees of ripeness of fruit are classified as hard green, hard ripe, soft ripe, overripe and decayed. The presence of fungus disease, insect injury or any other defects are also noted in the report. (19)

At principal receiving points another inspection is made of the perishable freight. Reports in general are of two kinds: first, what is known as a line-a-car report, which describes the general condition of the car; and second, a detailed report, which covers a detailed inspection of the car, the inspector noting all factors noted by point of origin inspector, and in addition, the amount of damage in transit if any, as well as the location of the same and the causes for it, if ascertainable. In making a statement as to the amount of damage present, emphasis is placed on the location and causes. For example, in the case of injury to potatoes, from freezing the report specifies whether the damage is distributed

(19) F. S. Welsh: Inspection Service at Point of Origin and at Terminal for Perishable Commodities, New York Central Railroad.

throughout the load or not. If frozen potatoes are interspersed with unfrozen specimens, it is, of course an indication of injury prior to loading, whereas location of the damage along the floor, side walls or at one end of the bunker indicates injury in transit. Since 1917 the Illinois State Food Administrator has taken the lead in providing official inspection service of perishable at the point of origin, (20) and similar service is now given at important point of origin by government inspectors. (21) The Federal government entered the field in fruit inspection last year when contracts were concluded between the department of Agriculture and the Seaboard Terminal and Refrigerating Corporation of New Jersey. (22)

When fruit is unloaded from a car to the terminal floor it is sorted for assignment to spaces that have been provided for different consignees, there to be displayed and delivered to purchasers. A space in the terminal for the car is chalk-marked and there are minor spaces chalk-marked for different sizes; so when the unloading of the car is completed the entire pile of one size fruit is kept together and the different varieties are piled in different spaces until each individual assortment stands in a space by itself. The samples are open ready for sale in the morning, either private or public. Each receiver has his representative present to superintend the sorting. While the labor is done by the stevedores and by different crews working under the stevedore foreman, the work is directed by a representative of the consignee. The representative who supervises the sorting is an employee of the consignee and is placed there by the consignee for that service.

After the prospective buyers have an opportunity to examine the entire display of fruit, the auction begins. The auction company is conducted in close relation with the storage company, for the two activities, auctioning and storing, must be co-ordinated

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(20) Railway Gazette, December 28, 1917.

(21) American Fruit & Produce Auction, U. S. Department of Agriculture Bulletin, No. 1362.

(22) See Contract between the Bureau of Agricultural Economics, Department of Agriculture and the Seaboard Terminal and Refrigerating Corporation; Appendix: II b, p. 208.

so that the produce may move through the terminal smoothly. The auction begins according to the catalog showing the entire assortment of varieties and sizes and the location thereof. (23) The catalogs are furnished by the auction companies and give the name of the company, the line numbers, the name of the seller, the brand, the size and sometimes the name of the auctioneers, time and place of sale. (24) They are printed before the arrival of the cars through information received from the carlot receivers.

Besides the auction companies attached to various produce terminals there are two F. O. B. auction companies, one in Pittsburgh and the other in Chicago, both having as their purpose the auctioneering of car lots of fruits and vegetables by telegraph while the cars are still at the loading stations, in transit or in storage. Both companies maintain salesrooms in several of principal markets in the Eastern and Central Western states connected by leased wires. Cars offered for F. O. B. auction sales are inspected at the point of origin by government inspectors who issue certificates of quality and condition. The contents of the certificates are transmitted to the auction company along with information for identification. The auction company upon receipt of this information lists a complete description of the cars in its catalog at each of the salesrooms. Auction is open to the public simultaneously in all the salesrooms, bids being transmitted to the main salesroom over the leased wires. The successful bidder issues billing or diverson instruction to the auction company; he may re-offer the car at a subsequent F. O. B. auction or at a delivered auction.

Reconsignment and diversion form an important transit service in the handling of perishable. These terms are used interchangeably and include "changes in destinations, routing, or consignee". (25) As pointed out by the Joint Agricultural Commission, fruits and vegetables are living, breathing organisms

(23) See the Rules of the Union Fruit Auction Company, Pennsylvania Lines Produce Station, Pittsburgh, Pa., Appendix IIc, p. 299.

(24) American Fruit and Produce Auction, op. cit., p. 19.

(25) Conference Ruling, No. 72.

constantly progressing toward maturity or deterioration. [26] Shippers and handlers must work under constant pressure of time. For this reason perishable freight is billed out from producing points to some centrally located point near consuming centres, in anticipation of demand. If cares are sold while they are in transit, orders are given to the carriers to intercept and hold them at intermediate delivery points. This service enables the shipper to choose the most favorable market and take advantage of market fluctuations, which are liable to occur while the fruits are in transit. Through this faculty, the fruits may be diverted to the place that offers the highest price. The shipper is thus able to forward large shipments from distant market without selling in advance of arrival. Where the terminal is under joint operation of two roads, shipments reaching the terminal via one line may be reconsigned to points served by the other.

It is difficult to calculate the extent of reconsignment and diversion in the handling of perishable freight for the country as a whole. The following example taken from the actual experience of a road may serve to illustrate the importance of the service. For a representative period of nine months, the Chicago and Northwestern Railroad received 5,500 cars at its Chicago terminals, 3,025 of the cars or 55% were originally billed to Chicago, and 2,475 or 45% of the cars were billed to stations east of Chicago. [27] After the cars arrived at Proviso and other yards of the Chicago and Northwestern Railroad in Chicago and after having checked with reconsignment orders which were on hand at the time of the arrival of the cars, it was found that instead of 55% of the cars being for Chicago as originally billed, 4,093 cars or more than 80% were sent east of Chicago. The record also indicates that during the same period there arrived at the Clinton Street team tracks of the Chicago and Northwestern Railroad 1,037 cars which were placed for unloading, but that the actual number

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(26) Joint Agricultural Inquiry: Report on Transportation 1920, p. 23.

(27) I. C. C. Docket 15137 California Growers & Shippers Protective League vs. Southern Pacific; (1925) Record pp. 845 et sq.

unloaded was only 620, and that 417 of them were reconsigned.

Financing is another important service in connection with the handling of perishable freight at terminal points. As a rule produce terminals do not grant loans on produce in storage. Financing is done through the use of negotiable receipts. Goods at terminal points are either owned by large shippers or by distributors, and in both cases financial assistance is necessary to carry the goods. The produce terminal issues negotiable receipts which may be used as collateral to secure loans. It is common in terminal areas to make loans to the extent of 75% of the value of the goods held in storage using warehouse receipts as collateral security. (28)

CHARGES:

The charges made by the produce terminal are: terminal charges, storage charges, handling charges and other charges incident to the care and distribution of perishables.

Terminal charge is a charge for the privilege of using the terminal as a delivery point when the shipment has been brought in to the city by another carrier. This privilege is allowed only on cars diverted from points on other lines from which it is not possible to give the line owning the terminal a road haul. An example of this may be cited in the case of the Duane Street Terminal in New York City, where there is a terminal service charge made on the delivery of fruits and vegetables received by the Erie Railroad from connections on the Jersey side on which shipment the Erie receives no part of the line haul rate. (29) This charge applies on fruits and vegetables in carloads originating west of Mississippi River which have been reconsigned from Albany, Baltimore, Philadelphia, Pittsburgh, Scranton or points east, on which the Erie has not had the benefit of participation in the line haul rate.

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(28) Shannon, H. H.: Warehousing & Transportation, Traffic World, March 22, 1930, p. 779.

(29) Fruits and vegetables to Duane Street, 66 I. C. C. 135.

Cold storage rates are based on the same principles in classification as the rates in merchandise storage, that is, on the bases of standard floor load and standard height of pile. (30) The standard floor load for cold storage warehouses is 250 pounds per square foot and the standard height of pile is 7½ feet. (31) This is the standard upon which the rates of all commodities are determined. To find the floor load of a particular commodity is to multiply the weight per square foot of that commodity in pile by the height to which the commodity can be practically piled, not to exceed the standard height of 7½ feet. Commodities having a lower density and therefore a lower "floor load" than the standard will bear a higher rate. Commodities having a higher density than the standard take the standard rate, because the height of the pile is also limited by the carrying capacity of the floor.

The above rule applies to bulk storage. The demand for service of various kinds makes it necessary to provide a segregation of brands, sizes and grades. This gives rise to the complicating factors of assortments, decreased piling height due to instability of pile in small units and excessive honeycomb. (32) There is also the difference in the types of service such as cooler and freezer. These are factors which modify the general bases of rates.

Handling charges include the ordinary labor and duties incident to receiving, storing and delivering merchandise but do not include loading or unloading cars or teams. (33) Handling charges are based on the actual labor costs with certain addition

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(30) For a detailed analysis of storage rates, see pp. 55-59 supra.

(31) This standard was promulgated by the Cold Storage Division of the American Warehousemen Association and was adopted by the trade in general.

(32) Honeycomb is the state or condition of a pile in assortment when partial delivery has reduced the number of packages in pile without proportionately reducing floor space occupied. See Tariff of B. &. O. 26th Street Store, (New York City).

(33) Tariff of Terminal Refrigeration and Warehousing Company, Washington, D. C. Rule 3.

to over the overhead expenses. Other charges incident to the handling of perishables include inspection, auctioning, reconsignment and diversion.

Economic Effects of Cold Storage :

The development of transportation facilitates and the growth of produce terminals at important distributing points have not only greatly reduced the cost of carriage and the time needed in transportation, (34) but have provided a co-ordinated means for the marketing of perishables. From the time fruit and vegetables leave the farm they are protected with continuous refrigeration. In the primary market, cold storage and refrigeration serve in pre-cooling and chilling the products until sufficient volume has been accumulated for economical shipment. In the movement from the primary market to the terminal market the refrigerator car is a cold storage plant on wheels. At the terminal market if the price does not favor immediate disposal, the shipment may be re-consigned to a more favorable centre or may be held in cold storage at the produce terminal. In the latter case the terminal may issue a negotiable receipt which offers a basis for bank credit in case the shipper desires cash. In this way cold storage and transportation co-ordinate to give continuous protection in the distribution of perishables.

Cold storage does not in any way change the article preserved in substance, appearance or taste, no is it less nutritious or digestible, provided the product stored is selected in prime condition. (35) It cannot of course be held responsible for damage and decay due to improper picking, grading, packing and handling. Under proper methods, cold storage surpasses all other means of preserving, such as drying, smoking and dry storage. Aside from serving as a mechanism in the co-ordinated marketing of perishables, cold storage has become a factor of vital economic significance.

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(34) See C. E. Artman: Food Costs and City Consumers, Columbia University Press, 1926.

(35) M. E. Pennington: Wholesomeness of Cold Storage Products, Proceedings of International Congress of Refrigeration, London 1924, p. 1746.

A beneficial effect of cold storage is to stimulate production of perishables. It does this by extending the period over which perishable products can be marketed. It is evident that if means of preserving the surplus are available so that the commodity may be sold to satisfy an effectual demand during a longer period, a larger quantity may be profitably produced, thus adding to the total food supply. Under natural conditions of trade, the tendency is therefor to increase production to the limit of quantity that can be profitably sold not only during the season of greatest production, but during the entire period of production and possible preservation. If this season of practical preservation extends to the following season of flush production, then it follows that the opportunity for profitable production has reached the maximum that can be consumed during the period at the lowest average price that will induce production.

Cold storage enables the transportation of perishables irrespective of distance. When the perishable products had to be transported to markets in common freight cars and express cars or by boats running on slow schedules, and the surplus fruit was stored in cellars, pits and fruit houses without artificial cooling, it was necessary to dispose of the crop quickly in local markets to prevent heavy losses from decay. Even under the most favorable conditions the market was limited to nearby areas, the period of consumption was confined to the producing season, and the market was barren during the remainder of the year. This difficulty was overcome by the development of the refrigerator car and a co-ordinated cold storage service. As a result wide distribution of perishable is possible. Any important centre can draw many food supplies from distant producing sections. New York has its largest single sources of fruits and vegetables in California, three thousand miles away; in 1928 it received 39,978 carlots of California fruits and vegetables, and 16,107 carlots of Florida fruits and vegetables. (36)

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(36) U. S. Department of Agribulture: Statistical Bulletin No. 30, Carlot Shipments and Unloads of Important Fruits and Vegetables, published May 1930, pp. 76-77.

CHAPTER IV

GRAIN ELEVATION AND STORAGE

The handling of grain illustrates in a striking manner the need of storage in orderly marketing of agricultural staples. Seasonal production and sale, varying yield and uncertainty of other factors, give rise to difficult problems in the annual distribution of grain. These problems are further complicated by the introduction of combines [1] and tractors in the harvesting of wheat. The new harvesting method results in a greatly accelerated movement of the grain to market as compared with the binder method of harvesting, when the grain remained on the field in shocks or in stacks for some time its movement was spread over a longer period. Despite this change in loading conditions the railroads keep the annual grain traffic in a continuous flow from the country points to the terminals. This achievement is an indication of the improvement in car service and adequacy of storage and elevation facilities.

Grain production is characteristically seasonal. The exact time for harvesting is beyond the human control. For the world at large the wheat harvest swings through the calendar, but three-fourths of the world's supply comes from North America where the major portion of the crop is available in the months from July to October. This seasonal production is attended with heavy seasonal movements. The farmer as a rule sells freely soon after threshing begins. This practice is readily illustrated from United States and Canadian data. In the United States an investigation made by the Department of Agriculture into the volume of grain marketed at 3,500 mills and elevators revealed that 60% of the grain was marketed within four months, July to October, and in Western Canada the wheat loading record showed heaviest loading from September to December. [2] The latest statistics show that

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(1) A combine is a new farm machine combining the two processes of harvesting and threshing into one continuous process. See the circular of International Harvester Company: "The Little Wonder."

(2) Hammath, T. D.: Seasonal Aspect of Wheat Exporting, Department of Commerce, Trade Information Bulletin No. 350, p2 (1925).

the marketing of grain by farmers is concentrated in four months from July to October.

Monthly Receipt of Wheat at Principal Primary Markets. (3)
(In thousands of bushels)

	1926	1927	1928	1929	1930
July	76,960	58,800	72,618	94,158	98,960
August	71,583	81,632	84,221	101,669	
September	48,731	79,740	73,322	47,046	
October	37,137	73,244	84,423	36,256	
November	29,745	44,823	43,532	20,625	
December	22,405	26,522	32,963	22,887	
January	21,640	24,595	23,542	22,537	17,530
February	16,188	20,952	22,488	28,698	19,920
March	15,101	16,605	26,263	27,220	16,683
April	14,011	14,420	17,949	17,472	13,441
May	15,663	19,258	25,922	18,637	16,535
June	21,058	20,665	15,544	25,694	18,705

Movement of grain and hence requirements for storage space are also affected from year to year by the variation in yield per acre. The yield of wheat for the entire United States in 1928 was 15.7 bushels per acre, and in 1929 only 13.2 bushels. (4) In Kansas, which is the source of a large part of hard winter wheat, the yield per acre was 17 bushels in 1928 as compared with 9 bushels in 1925. (5) Climatic conditions also play an important part in the total production and hence in the annual movement of grain. The situation is more forcefully presented in the statement that, according to the best available information, (6) about 80 percent of the hard spring wheat grown in the United States is produced in three states, Minnesota, North Dakota and South Dakota. The concentration in hard winter wheat is not so great, although probably over two-thirds of the annual crop is grown in

(3) U. S. Department of Commerce: Survey of Current Business.

(4) Department of Agriculture Year Book, 1930, Statistics of Grain pp. 595-601.

(5) Ibid.

(6) Ibid.

Kansas, Nebraska and Oklahoma. Similarly over half of the soft winter wheat is grown in four states, Missouri, Illinois, Indiana and Ohio.

The size of the crop grown within one state may not be used as a measure of the grain movement from that state, or of its need for storage space, because the domestic demand for flour is greater in some states than in others. Due to advantages in manufacture, transportation, or marketing, local mills grind a much larger proportion of the crop in some states than in others.

Since all grains moveing the general direction from the farm and the country shipping points to the terminal markets, the receipts of grain at the terminals may be used to indicate the extent of terminal storage. It is at the terminal markets that the railroad is interested in grain elevation and storage.

Report of Grain in Storage Public Elevators at Terminal Markets & Ports (7) Conditions as of 2nd week of December, 1930 Figures in Thousands of Bushels.

	Total Capacity	Stocks on Hand	Per Cent Capacity used
Chicago	17,330	12,525	72.3
Kansas City	29,000	23,184	79.9
Omaha	17,987	13,989	77.8
Minneapolis	63,008	50,646	80.4
Duluth-Superior	51,400	30,926	60.2
Milwaukee	11,480	7,862	68.5
Toledo	6,750	4,401	65.2
Buffalo	30,000	23,532	78.4
Boston *	2,500	622	24.9
New York *	6,950	3,119	44.9
Philadelphia *	4,725	837	17.7
Baltimore *	11,873	8,169	68.8
New Orleans *	5,122	4,594	89.7
Galveston %	9,150	5,187	56.7
Houston %	4,500	1,310	29.1

Note: * Stocks at Atlantic Ports & New Orleans include grain in export elevators only.

% Indicate total storage, public and private. Separate figures not available.

(7) From figures published by Car Service Division; American Railway Association, on weekly Grain Storage, Dec. 17, 1930.

DEVELOPMENT OF RAILROAD ELEVATORS :

Prior to the seventies, the inland grain movement was on a local basis. When the trunk line system reached the Mississippi and Missouri Rivers, however, conditions were radically changed. (8) Western grain was no longer consumed at home it now sought distant markets. Hence it became necessary to consider the aggregate rates from producing to consuming centres and to adjust inbound with outbound rates for a given interior market so that the combination of the two should not be higher than similar combinations through other gateways. Local rates become increasingly less important. Competition between different grain markets became increasingly keen. Out of this competition soon evolved a destructive rate war. Each carrier sought to develop its own terminal primary markets and to secure for such centres a territorial monopoly of grain shipments. (9) In this development, the carriers either built elevators as a part of their terminal facilities and performed commercial warehousing services, or built elevators for the grain merchants who used their transportation lines. The roads were a law unto themselves. There was no regulating body to say what the maximum of any rate might be or to define the difference between "transportation" and "commercial" elevation. Discrimination and favoritism were prevalent. Free services were offered to those who were big enough to be considered important.

In this chaos of conflict, the railroads vied with one another to terminal elevators. There were several considerations that led to such development, the most important of which were to increase traffic, to release equipment and to provide elevation at break bulk points. As stated by the president of a mid-western railroad, the control of elevator facilities gave his company additional footing in traffic and that a large sum paid to acquire an elevator was

(8) See Benjamin F. Goldstein: Marketing, a Farmer's Problem, Part IV Railroad Development. (Macmillan Co., 1928).

(9) Inquiry by Interstate Commerce Commission into the Relation of Common Carriers to Grain Trade, 59th Congress 2nd Session, Senate Document No. 278, pp. 287-88.

justified by the fact that, he could not afford to have such facilities pass into the hands of his competitors. (10) In like manner the early elevating facilities in Kansas City and other terminal markets were built by the railroads competing for traffic and the bulk of storage, although operated to a large extent by private concerns, has always been owned by the railroad companies. A second consideration, that of releasing equipment of transferring the commodity to a connecting line, is less important now than at former times when the practice of routing cars through to destination was less common, and facilities for transferring were necessary at junction points. A third consideration that induced the railroad to construct elevators along its lines was to provide elevation at break bulk points. This service is now known as transportation and is required by law. (11) As defined by the commission, "transportation elevation" is "the loading of grain from cars or grain-carrying vessels into a grain elevator and loading it out again after a period not to exceed ten days". (12) This service does not include treatment or grading, cleaning, and clipping of grain; and retention in an elevator beyond ten days becomes storage and is not a part of the service of transportation as that term is used in the statute. (13) It was to provide this transportation elevation that the carrier found it necessary to operate elevators at transshipment points such as Buffalo and the ocean points. In the interior terminal points this obligation has often been met by contracting with private operators for transfer service as will be explained later.

Railroads as Elevator Men:

Railroad elevators are of three kinds: interior terminal elevators, seaboard terminal elevators and floating elevators.

The interior terminal elevator is operated at interior terminal points such as Minneapolis, Chicago, Kansas City, Omaha,

(10) Ibid, p. 115.

(11) Interstate Commerce Act, Section 1, Clauses 3 and 4.

(12) Allowances to Elevators by Union Pacific, 12 I. C. C. 85.

(13) Ibid.

Milwaukee, Toledo, for the purpose of storing, conditioning and shipping the surplus supplies of grain received. Here the grain is warehoused and is readily available for consumption or shipment. The seaboard terminal elevator is operated at seaboard points such as New York, Philadelphia, Baltimore and Galveston and is equipped with facilities of direct shipside loading for handling export grain. Grain cannot be loaded directly from the car to the steamer. In order to promote the even flow of grain and that regularity of supply which would attract boats to the particular ports reached by their lines, the competing railroads have undertaken to provide storage facilities in their elevators. The floating elevator is operated by the railroad at seaboard terminals to serve steamship lines at points where the vessel cannot be loaded alongside a stationary elevator plant.

In the operation of these different types ot elevators there is a distinct contrast in railroad policy. For interior terminal elevators the railroads found that their chief interest, that of securing tonnage, can be served fully if not even more effectively by leasing them to private shippers or elevator companies and contracting for the transfer of grain over their own lines. At seaboard points the railroads found it to their advantage to maintain direct control over the export elevators as prompt handling is necessary to release equipment and to avoid congestion. It is estimated that 35% of the terminal elevator capacity of the country is owned by the railroads, three-quarters of this being leased to shippers. At seaboard points the railroads own about 69% of the rated capacity and in most instances retain operating control. (14)

The System of Leasing:

There are various reasons for the development of the practice of leasing. In the first place the railroads have found it to their advantage because tonnage can be secured more effectively by leasing the house to a large dealer who has every incentive to route the grain over lessor's line. The dealer's experience and his knowledge of the grain business compensates the railroad in ways

(14) See Table in pp. ~~110-113~~ infra. 85-96

that cannot be offset or obtained by a mere increase in the rental.

As the interior markets are frequently the terminals of various roads, so that the incoming lines have no interest in the grain after it reaches the terminal and the outgoing lines have no interest in the grain except after its arrival. At such points there has often been an advantage for the railroad company to lease a terminal elevator to an individual dealer with the specific agreement that the grain owned by the lessee shall be brought in or shipped out over the lessor's line whenever possible. Such leases are generally given on favorable terms to the dealers, as a means of securing competitive traffic. This was explained by a railroad vice president in charge of traffic: (15)

"The people who are occupying these properties have been for years in the purchase of grain that has been shipped over the Chicago, Milwaukee and St. Paul Railroad. They are familiar with the points of consumption and the dealers who consume the various products passing through the elevator; and the mere fact of this long experience and knowledge in the conduct of the business in itself is a compensation if we gave them the elevators for nothing, rather than to advertise or to put on the auction block in any way these properties to people who did not have the same knowledge and experience for securing business to the Milwaukee and St. Paul Railway that the lessee did."

Aside from securing competitive traffic the question of operating cost often favors the leasing arrangement. At competitive points in the interior, the terminal elevators give the railroad no assurance of profit, and frequently incur losses in operation. Through the leasing arrangement the railroad is assured of a fixed rental on an interested basis and is relieved of some of the vexatious problems arising in connection with operation.

Analysis of Leasing Agreements:

In making an analysis of the leasing agreements, an attempt will be made to trace the origin, changes and the present status of several important elevator leases, namely, the Keystone Elevator of Philadelphia and the several elevators at Kansas City. These

(15) Senate Document No. 278, op. cit., p. 626, Testimony of J. H Hiland vice president in charge of traffic, C. M. & St. P. Railroad.

leases were the subjects of much investigation, and it is hoped that an analysis of them will give an historical background on the subject.

THE KEYSTONE ELEVATOR LEASE:

In 1903 the Pennsylvania Railroad leased to the Germantown Junction Elevator and Warehouse Company, later known as the Keystone Elevator Company, a plot of land adjoining its tracks at North Philadelphia and constructed thereon wholly at the expense of the railroad a fully equipped grain elevator and a warehouse. The value of the land belonging to the railroad company included in the lease was stated by the railroad to be $15,000. The elevator structure and machinery cost the railroad company $163,065.09. The annual expense to the railroad for keeping the elevator in repair was estimated at $3,805.50 per annum. In return for all these investments and maintenance expenses the railroad received an annual rental of $6,000. Deducting from this sum the yearly cost of maintenance born by the railroad company, it appeared that the railroad received $2,194.50 or about 1¼% annually on its investment. (16)

The railroad bound itself to pay to the elevator company an allowance for each ton of grain and merchandise handled through the elevator and warehouse, excepting that no payment was to be made upon traffic for the movement of which the railroad received only a switching charge. The amount of allowance was fixed in 1903 at 35 cents per 2,000 pounds. This was reduced to 20 cents per 2,000 pounds when the contract was renewed in 1910. By July 1st, 1918 the allowance was increased to 50 cents per 2,000 pounds. (17)

In return for the allowance the elevator undertook to use all reasonable efforts to secure to the railroad company all traffic controlled by the elevator company or destined to or from the elevator, and to confine the services of the elevator to traffic

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(16) re Keystone Elevator Company, I. C. C. Docket 3372 (1913); reported in 25 I. C. C. 618.

(17) Keystone Elevator vs. Director General, as Agent, 73 I. C. C. 237.

passing over the lines of the railroad company. The elevator further undertook to load and unload all grain and merchandise received by it, to notify consignees of the arrival of such shipments, to collect all freights and other charges, to indemnify the railroad for all damage or loss of grain or merchandise in its custody and to take charge of grain as warehousemen for account of the owners at the expiration of the free time.

In the investigation it was developed that 92% of the grain passing through the elevator belonged to the firm L. F. Miller & Sons which was controlled by Harvey C. Miller, the president of the elevator company. (18) The records showed that from July 1, 1908 to June 30, 1909 the total income of the elevator was $74,563.85. Of this amount the railroad paid $37,477.85, L. F. Miller & Sons, whose grain formed the bulk of the elevator trade paid $34,057.55. Sundry owners of grain passing through the elevator paid the remaining sum, $3,028.45.

Out of the total income Harvey C. Miller received $48,770.83 for his service in operating a cleaner and for the dividend arising out of the cleaner operation. This amount exceeded the entire sum collected by the elevator company for elevator services from all shippers by the sum of $11,684.83. The practical result is that the Miller interests secured the service for his grain gratis and received in addition $11,648.83 for completing a lease with the railroad.

As a result of this investigation, an order was entered by the Commission directing the Pennsylvania Railroad, (19)

"to cease and desist for the period of two years from paying any allowance for terminal services to the Keystone Elevator & Warehouse Company upon any property passing through such elevator belonging wholly or in part to any stockholder of said Elevator & Warehouse Company unless its published tariffs shall at the same time offer such allowance to all other shippers using said or any other elevator in the city of Philadelphia."

(18) See Keystone Elevator vs. P. R. R. 246 Pa. 337; also 237 U. S. 432.

(19) 25 I. C. C. 618 (1913).

In anticipation of the order of the Commission, Harvey C. Miller sold his interest in the grain firm, L. F. Miller & Sons, to his brothers in 1912. By thus complying with the order of the commission, the Keystone Elevator Company was permitted to continue receiving allowance from the Pennsylvania Railroad. Two further investigations were made by the Commission, one in 1913 and another in 1919, to determine whether the severence of relationship between Harvey C. Miller and the grain firm, L. F. Miller & Sons, was in good faith. (20) In both cases the investigators were satisfied with the conditions. The allowance given to the Keystone Elevator Company was continued under authorization of tariff provisions, (21) until August 17th, 1925, when the Pennsylvania Railroad took over the elevator and operated it directly. (22)

Elevator Lease Investigation in Kansas City:

In 1913 upon the complaint of the Omaha Grain Exchange, (23) an investigation was made into the leasing situation of the elevators at Kansas City. It was found that the various carriers whose lines of road reached the Kansas City market built or caused to be built large terminal elevators. The Atchison, Topeka and Santa Fe built the Santa Fe Elevator; the St. Louis and San Francisco built the Frisco and Memphis Elevators; the Chicago, Rock Island and Pacific built the Rock Island and Terminal Elevators; and the Chicago, Burlington and Quincy built the Murray Elevator. (24) These elevators were either operated as subsidiaries or leased to operating companies at

(20) See Testimony of Harvey C. Miller in Keystone Elevator Co. vs. Director General, as Agent, Docket 12818, Record pp. 41-47. (1922).

(21) P. R. R. Tariff, Allowances on Various Services, G. O. I. C. C. 8340, Supplement No. 9; also G. O. I. C. C. 9324; and G. O. I. C. C. 11688.

(22) P. R. R. Tariff, Allowance on Various Services, G. O. I. C. C. 13640, Supplement 12.

(23) Omaha Grain Exchange vs. A. T. & S. F., 28 I. C. C. 664. (1913).

(24) Brief of Omaha Grain Exchange in Omaha Grain Exchange vs. A. T. & S. F. I. C. C. Docket 5218.

nominal rentals. By such operation, the terminal elevators were used by the carriers for the purpose of inducing tonnage or shipment of grain over their lines, and the deficit or loss in the operation or management of the terminal elevators at the end of the years was paid and made good by the carrier owning or controlling the stock in the subsidiary or operating companies. Where the elevators were leased, they were leased at inadequate rental. The elevators were so leased for the purpose of inducing the grain dealers to whom they were rented to ship their grain east or south over the lines of the road so owning and leasing the elevators.

After the complaint was filed a meeting was held at Chicago under Commissioner Prouty at which the Kansas City interests and the Omaha interests were present. The matter was gone over at length Commissioner Prouty, and it was suggested that it was a proper procedure to have all of the elevators appraised by disinterested appraisers, and that they should then be leased by the carriers to bona fide lessees on a basis of a certain percentage of their appraised valuation, so that the carriers would no longer have any interest in the operation of these houses, and that it could not be said that the lease was a subterfuge. This plan was laid before Commissioner Prouty and met with his approval. Accordingly three disinterested appraisers were selected and fixed an appraisement on all of the elevators. Negotiations were then entered into between the various parties in Kansas City and the carriers to effect leases based on that valuation and the percentage of that valuation that it was agreed would be a fair value. (25)

The matter was re-opened in 1918 upon the complaint of the receivers and shippers at Kansas City not operating elevators that the lessees of railroad elevators controlled the storage and transfer facilities of the market to the serious disadvantage of other dealers. An investigation was instituted by the Director General through Commissioner Harlan as special agent. It was developed that the rentals of the elevators were on the basis of five per cent of their

(25) See example of the lease concluded between Chicago Rock Island and Pacific Rd. and J. Rossbaum, operator of the Terminal Elevator, Appendix. IIIa p. 241 infra. 212

appraised value, the railroads, however, paying the taxes, fire insurance, heavy repairs renewals or replacements, and the lessee paying only for light repairs. (26) It was further developed that the control of the railroad elevator properties by a few lessees gave them an advantage at the cost of other grain dealers at that market. It was recommended that certain leases be surrendered so as to provide the independent receivers and shippers with the facilities necessary to operate under the existing conditions and the rentals were revised on the basis of forty per cent increase. (27)

At present most of the public elevators, particularly the larger ones, are owned by the railroads which lease them to operating grain firms. (28) The leases are not uniform as to their terms and conditions, because of the differences in sizes, construction, location and other physical factors. (29) The charges for storage and elevation services, however, are uniform and are governed by the lessor railroads which prescribe uniform charges to equalize competition.

LEADING PROVISIONS IN ELEVATOR LEASE:

From the above analysis it is clear that the purpose of the railroads in leasing their elevator facilities is to secure traffic. This is evidenced in the provisions of such lease. The lessee is expected to use all reasonable efforts to secure the railroad all traffic controlled by the elevator or destined to or from the elevator. A typical lease provides that "no other railroad or transportation company, or person engaged in transportation, shall be allowed to use any track upon or extending to the premises without permission in writing of the railroad company, and the railroad company shall have the exclusive right of carrying all grain to be transported by

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(26) Report of Commissioner James S. Harlan on Elevator Situation at Kansas City, 1918; see also Federal Trade Commission Report on Grain Trade, Vol III, pp. 101-103.

(27) Ibid.

(28) Letter from W. S. Scott, Secretary of The Board of Trade of Kansas City dated December 30th, 1930.

(29) Ibid.

rail or from the elevator". (30) To enable the lessee to route the traffic via the lessor railroad, the latter undertakes to insure the rates over its own lines, and of the routes of which its lines form a part, shall be as favorable as the rates of rival carriers.

Elevator charges are controlled by the railroad. As a rule a major portion of the grain entering the elevators is controlled by the elevator, in addition to the traffic coming from the public. A provision in a railroad lease provides that "the lessee will not charge more than two cents per bushel for receiving, storing not longer than ten days, elevating and delivering grain at said elevator, or such less rate as the railway company shall from time direct; and that the elevator will clean all grain delivered at the elevator if required at prices satisfactory to the railroad company." (31) In addition the lessor railroad has free access to the elevator for the purpose of inspecting the receiving, weighing, elevating and delivering of grain and also free access to the books, papers and vouchers of the lessee connected with business, and has right to send competent persons to test the scales, the expenses of such tests to be paid by the lessee. (32)

The lessee may undertake to operate as public elevatorman or as agent of the railroad. As an agent of the railroad, the elevator company undertakes to "elevate, weigh, store and transfer to boats or vessels or other receptacles at the elevator, on behalf of the railroad company all grain delivered to the elevator by the railroad company" (33) On grain which is ordered on storage the elevator company agrees "to issue its warehouse receipts in the place of the railroad bill of lading covering the grain and at the time of such issuance to take up such bills of lading properly endorsed and safely retain and preserve the same, and to collect and remit to the railroad company the transportation or other charges against

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(30) From Grain Elevator Lease, Form R. W. 3, now in use by Northern Pacific Railway Co., see Appendix IIIc pp. 245 infra. 214

(31) Ibid, Clause 9.

(32) Ibid.

(33) Lease agreement between the Erie Railroad and the Erie Elevating Co., Clauses 1 and 2, See Appendix IIIb pp. 248 infra. 215

such grain up to the time of its receipt by the elevator". (34)

Regarding the rental provision, it is generally provided that the lessee shall pay an annual rental based upon 5% of the agreed valuation of the property, in addition to the payment of all taxes and assessments levied or assessed against the premises. When the lease extends over a period of twenty years, a provision is made for a revaluation at the end of five or ten years, such valuation is to be determined by disinterested parties in default of mutual agreement of the railroad and its lessee. (35) Regarding the regulation of rental charges, the Commission made this comment: (36)

"Effective public supervision in this matter is obviously very difficult .....In this connection, shippers and others who believe that they are subjected to undue prejudice and disadvantage can be of assistance by bringing such situations to our attention."

THE SYSTEM OF RAILROAD OPERATION:

Although the railroads are large owners of elevator capacity, their elevator operations are confined to the seaboard points. To fulfil the requirements of the law the railroads had to build elevators along their lines as a part of their terminal facilities in the early days of the terminal markets. This policy was followed by the Illinois Central, the Chicago, Rock Island and Pacific, the Great Northern, the Union Pacific, and the Atchison, Topeka & Santa Fe and other lines penetrating the newly developing grain areas, as well as by the trunk line railroads running east from Chicago. As explained in preceeding pages, the railroads found it to their advantage to lease such facilities at interior terminal points to large shippers rather than to operate them. At seaboard points, however, the purpose of acquiring such facilities is different. Here the railroads are interested in efficient service as well as in securing traffic. In consequence, the railroads retain in many cases direct

(34) Ibid.

(35) Northern Pacific Railway Co: Rules Governing the Leasing of Railroad Property, issued by the Land Commissioner, Northern Pacific Ry. Co.

(36) 73 I. C. C. 671, 683.

operating control through ownership or operating agreement. The extent of elevators with railroad affiliation at important terminal points is indicated in the following table: (37)

Elevators with Railroad Affiliation at important Terminal Points.

1930

Location	Elevators	Rail ownership	Capacity (bushel)
Baltimore:	Canton	P. R. R.	4,250,000
	No. 2	P. R. R.	300,000
	Locust Point	Baltimore & Ohio	3,800,000
	Mt. Clare "E"	Baltimore & Ohio	250,000
	Port Covington	Western Maryland	4,000,000
Boston:	Hoosac Dock	Boston & Maine	1,000,000
	Mystic Wharf	Boston & Maine	500,000
	B. & A. Elevator	Boston & Albany	1,000,000
Buffalo:	Marine A	N. Y. Central	1,000,000
	Marine B	N. Y. Central	2,200,000
	Transit	Erie	750,000
Chicago:	Chicago & N. W. Terminal	C. & N. W.	5,470,000
	Grand Trunk	Grand Trunk	500,000
	New York Central	N. Y. Central	1,250,000
	Santa Fe	Santa Fe	1,350,000
	Wabash	Wabash	950,000
Cincinnati:	Big Four Elevator	Big Four	600,000
Duluth-Superior:	Consolidated B-I	Northern Pacific	9,000,000
	Occ dent	Northern Pacific	2,500,000
	Peavy Terminal	Northern Pacific	4,000,000
	Great Northern	Great Northern	7,500,000
	Ithasca	C. M. & St. P.	1,300,000
Galveston:	Rosenbaum	Southern Pacific	1,000,000
	Sunset	Texas-New Orleans	1,000,000
Kansas City:	Katy	M. K. T.	2,300,000
	Great Western	Chi. Gt. Western	1,000,000
	Frisco (2)	St. Louis-San Francisco	1,050,000
	K. C. S.	Kansas City Southern	1,100,000
	Pacific	Missouri Pacific	3,000,000
	Terminal	Rock Island	2,500,000
	Milwaukee	Rock Island	2,900,000
	Wabash	Wabash	2,100,000
	Elevator A	A. T. & St. F.	6,000,000

(37) This table is compiled from data secured from various boards of trade, chambers of commerce, railroad traffic guides and government publications.

Location	Elevators	Rail ownership	Capacity (bushel)
Milwaukee:	St. Paul "E"	Chi. M. & St. P.	3,500,000
	Rialto	Chi. & N. W.	1,500,000
	Kinnickin	Chi. & N. W.	3,350,000
	Calumet	Chi. & N. W.	1,300,000
Minneapolis:	Commander	M. & St. Louis	2,600,000
	Delmar	Chicago G. W.	1,500,000
	Electric Steel	Gt. Northern	4,000,000
	Gt. Northern	Gt. Northern	1,500,000
	Marfield	Chicago G. W.	1,200,000
	Marquette	Chicago G. W.	2,000,000
	Pioneer Steel	Gt. Northern	2,100,000
	Republic	N. Pacific	1,750,000
	Soo Terminal	Sue St. Marie	2,300,000
	Union	Gt. Northern	3,300,000
Mobile:	Mobile & Ohio	Mobile & Ohio	200,000
New Orleans:	Poydras Yard	Illinois Central	250,000
	River Front "D"	Illinois Central	1,000,000
	River Front "E"	Illinois Central	1,500,000
Newport News:	Chesapeake & Ohio	C. & O.	1,000,000
New York City:	Lehigh Valley (Jersey City)	Lehigh Valley	450,000
	Erie (Jersey City)	Erie	1,000,000
	West Shore (Weehawken)	West Shore	2,000,000
	60th Street	N. Y. Central	1,500,000
Omaha:	Cromwell No. 1	Illinois Central	1,200,000
	Nye Jenks Gr. Co.	Missouri Pacific	1,500,000
	Updike	Chicago G. W.	1,750,000
	Independent	Chicago G. W.	1,750,000
Philadelphia:	Girard Point	P. R. R.	2,350,000
	Port Richmond	Reading	2,000,000
Portland, Maine:	Grand Trunk (2)	Grand Trunk	2,500,000
Portland, Oregon:	Terminal No. 4	Union Pacific & Southern Pacific	2,000,000
	Globe	S. P.	350,000
	Kerr	S. P.	700,000
St. Joseph:	Burlington	Chicago B. & Q.	1,000,000
	Great Western	Chicago G. W.	100,000
St. Louis:	Burlington (old)	Chicago B. & Q.	1,400,000
	Burlington (new)	Chicago B. & Q.	1,000,000
	Checkerboard (2)	Missouri-Pacific	1,450,000
	Missouri-Pacific	Missouri-Pacific	2,000,000
Toledo:	East Side	N. Y. Central	1,500,000
	National	Wheeling & L. Erie	2,500,000
	B. & O.	B. and O.	800,000
	Lake Shore	N. Y. Central	275,000

FACILITIES:

It is difficult to generalize on the physical facilities of railroad elevators, as elevator construction involves a great deal of technical detail, which must be adjusted according to the location and the purpose for which the elevator is built. In general it may be said that the grain is unloaded at the elevator either by power shovels or by dumpers. The shovels or the dumpers discharge the grain into the hopper or pit into which the feet of the elevator legs descend. From these bucket conveyors running inside the legs hoist the grain to the topmost story of the house, where it is discharged, by turning over a head pulley, into the hopper of the turnhead spouts, thence into the garners, and thence into the weighing hoppers if the grain has not already been weighed on track scales when spotted for unloading. From the scale hoppers the grain is spouted into car spouts for reloading or transferring or into storage bins for storage, or into the garners above the cleaning machinery when conditioning is necessary. All elevators are equipped with conveying belts for transferring grain from one part of the house to another. A workhouse, which formerly was included in the main structure but is now built as a separate unit, contains special bins and machinery for cleaning, drying, mixing and conditioning the grain prior to storage or transfer to a vessel or a car for shipment.

Marine elevators for transferring grain from vessels to railroad cars are provided on the dock or water side with elevator legs outside the house which are mounted on wheels, permitting movement along the side of the house and allowing the legs to be set opposite the vessel's hatches. These marine legs convey the grain to the turnhead spouts, whence it passes to the garners, scales, cleaning machinery, if desired, or to car loading spouts. In New York, Baltimore and Philadelphia the railroad elevators are equipped with facilities to handle export traffic, to receive grain from cars to inland vessels and to store it for later loading abroad ocean vessels.

INTERNAL ECONOMY:

There are two fromulae to measure the internal economy of an elevator, capacity turnover and capacity utilization.

As the main purpose for which railroad elevators are operated is to furnish transportation elevation rather than for storage space, the grain should pass through the elevator as soon as shipping conditions permit, and should not be allowed to remain in the elevator indefinitely. A study of the capacity turnover will reveal to what extent the grain moves through the elevator. As a rule, transfer elevators at seaboard points have a high turnover index as compared with elevators at interior terminal points where storage to a longer period is prevalent. Even at seaboard points some time must be allowed for storage after the grain is received into the elevators from the cars. What constitutes a reasonable time for storage purposes may be gathered from the provisions of the tariffs. (38) By these tariffs no charge is made during the first 20 days of storage at the North Atlantic ports except New York, after the first 20 days storage charges on a sliding scale are imposed.

The reason for this is to be found in the nature and requirements of the export grain traffic. It is through traffic from the interior points to foreign countries, in which both rail and water carriers participate. The tidewater terminal is merely the point of transfer from the rail to the water carrier, and in order to complete its transportation service, the rail carrier must not only bring the grain to the tidewater terminal but must have sufficient quantity in store as to make it available for delivery to the water carrier.

Capacity utilization is conditioned by a number of factors. Consideration must be given to the nature of the business which an elevator conducts, to the number of bins which it has and to the number of kinds and qualities of grains which must be kept separate. Thus some elevators are used primarily for transit purposes, others are used largely for conditioning and mixing grain and still others largely for storage. The railroad seaboard elevators are used largely for transferring grain and must have a considerable amount of space available constantly for receiving incoming grain by grade and class and for loading out grains into

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(38) See table p. ~~123~~ 104 infra. and Foot Note No. 47 on page, ~~122~~. 104

cars or boats. There are 115 grades of grain at New York, prescribed by the Produce Exchange. At Baltimore there are 128 grades as shown by the rules of the Baltimore Chamber of Commerce. The various processes through which grain is prepared for shipment include mixing, cleaning, blowing, screening and drying. The mixing of various grades of grain on request of shippers may tie up the facilities at an elevator for a time. The amount of delay caused by this process depends upon whether a sufficient quantity of the proper grades can be obtained in the elevator, or whether a selection has to be made from the yard.

It may be said, therefore, that the working capacity of an elevator varies in reverse ratio to the number of grades it handles. As the number of grades increases, the capacity of the elevator decreases because there is lost space and it is necessary to have empty bins in order to work current grain through to the ships. It is generally conceded in elevator circles that an elevator is about full, to all practical intents and purposes, when it has about 75% of its capacity occupied, that is, when it contains about 75% of its capacity in grain of the several varieties which are normally held at one time. (39) This is the working capacity of the elevator that is filled and there is practically no such thing as a literally full elevator.

Services:

The services performed by a terminal elevator are transferring, conditioning and storage. Grading and inspection services are also performed in an elevator by state or Federal inspectors.

As defined by the Chicago Board of Trade, straight transfer must consist of transferring of grain from one car to another without its identity being lost. If transferred through the elevatar the grain must go direct from the unloaded car to the scales and from the scales direct to the car to be loaded without going into or through any house bins. The charge for this service is usually absorbed in the freight rate, and when it is done by private

(39) Testimony of Brown, Manager of B. & O. Elevator, Baltimore in I. C. C. Docket No. I. & S. 833 p. 126 (1916).

elevators the service is usually paid for by the railroad. This payment is known as elevation allowance.

Elevators at Buffalo are the most notable example of transfer business. The transfer of ex-lake grain at that point is the principal source of revenue for the elevators. The main object of most of them has been to move the grain rapidly so as to increase capacity turnover and transfer earnings. Grain is stored in special bins without inspection and without weighing and is held until the outgoing loading order is provided by the owner.

The conditioning of grain covers a variety of operations most of which have become highly technical. These processes prepare the grain to meet milling requirements, to render it merchantable and in a general way to enhance its value. These operations are generally performed on the request of the shipper. Under the standards of grade, as established by the Department of Agriculture, the "ungraded" or "no grade" grains are received in a special bin to be reconditioned through such processes as cleaning, turning, mixing, drying, clipping, smutting and bleaching. In drying, a loss of weight is unavoidable. In Philadelphia all grain is dried under the supervision and control of the inspection department of the Commercial Exchange. All loss in weight by heating or other causes in elevation is born by the owner. Clipping and smutting services are performed by the means of special machines. The bleaching process brings damaged grain back to its natural color and removes foreign odors. Mixing has been a subject of great controversy in the grain trade. Its main object is to raise the grades of inferior or low grade grain by mixing it with grain of high grade, e.g., if one car of No. 3 Northern wheat is mixed with five cars of No. 1 Northern, the chances are that the whole will grade as No. 1 Northern. This is practiced on a large scale. (40) At the railroad elevators different grades of grain are mixed under the supervision of the local inspection department, with a view of releasing additional bin space for storage. The elevator calls up

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(40) See Federal Trade Commission; Grain Trade, op. cit., Vol. III, Chapter 5, Section 2, pp. 154-161.

the local inspection department and asks that mixing orders be secured to cover certain lots of grain represented by outstanding warehouse receipts. The inspection department arranges with the merchants interested to issue signed mixing orders which designate the grades, the specific quantities and warehouse receipts covering these quantities so as to relieve the elevator of the responsibility of mixing. The railroad mixing operations in contrast with the private elevator operations bear little or no relation to merchandising profit.

Storage is in many cases essential in the transportation of grain either to await connecting carriers or to wait for a favorable market. The change is generally divided into two periods, the initial period and period of storage thereafter. The charge for the initial period is usually combined with the elevation charge. It is not free. The commercial expression "free storage" is merely colloquial manner of defining a minimum period for which storage may be contracted or the number of days covered by minimum charge fixed by the elevator.

Except by special arrangement, grain will not be received in store by the railroad elevators until it has been inspected and graded by authorized inspectors. (41) The operation of inspection and grading together with related weighing is variously performed by appointees of the exchange or of the state, or by a combination of these authorities. Formerly the co-ordination of activities from two divergent sources often gave rise to administrative confusion. The Federal Grain Standard Act providing for supervision of grain inspection in interstate and foreign commerce became effective in 1916, and since grain movement is largely interstate the Federal Act has superseded local regulations.

The adoption of Federal standards was necessary. The grades established by various state and trade bodies were in the main not explicit in their definition of various grading factors, and were therefore almost entirely interpretative. It was inevitable that competition should bring about an application of grades in

(41) P.R.R. Tariff on Elevator Charges, Floatage, & other Terminal arrangement at Philadelphia & Camden, No. 1145-A, I.C.C. 141.

keeping with the competitive conditions prevailing within a particular market or port. These conditions result in much dissatisfaction and controversy in the trade. (42) With the adoption of Federal standards, the exchanges and most of the states have brought their grades into conformity with the Federal standards.

Sack-Handling :

While the export grain is handled almost exclusively in bulk, on the Pacific coast it is mainly handled in sacks. There is an historical background for such practice. Prior to the opening of the Panama Canal a large part of the grain shipped from the Pacific ports went to Europe in sailing vessels around Cape Horn, a voyage long and rough. A large number of these vessels were tramps that had left European ports for the Orient, whence they crossed the Pacific to the American ports on the Western coast, picking up a cargo of grain for home. Such vessels were not equipped with bulk handling facilities. The danger of cargo shifting, the disastrous explosion of overheated grains through the tropics together with prohibitive insurance rates forced these vessels to accept only grain in sacks. Attempts were made by the Northern Pacific and the Great Northern Railroads and the Oregon-Washington Railrord & Navigation's Company to handle grain in bulk in the Pacific Northwest by erecting elevators at Portland, Oregon, but as ocean vessels were not in a position to handle the grain in bulk these elevators were either abandoned or convered into flat warehouses. (43) In recent years new attempts have been made to introduce the system of bulk handling. This interest is shown by the erection of new municipal grain elevators at Portland and Astoria, Oregon, and by the increased percentage of bulk wheat receipts at these two ports as reported by the Oregon State Grain Inspection Department. In the crop

(42) R. T. Miles: Official Review of Ten Years of Federal Grain Inspection. The American Elevator & Grain Trade October 15, 1926 p. 210.

(43) H. T. Lewis: Elevator Movement in Pacific Northwest, Journal of Political Economy, Oct. 1916.

year 1927-28, 26.4 percent of the wheat receipts at these two ports was in bulk. In 1928-29 this percentage had increased to 32.2 percent. (44) In California, the change to bulk storage has been slow, because of the lack of bulk storage plants at terminals for public use. In none of the cities of California are there municipally operated grain elevator. (45) Oakland has a privately owned 1,250,000 bushel public bulk elevator. Private mills and grain firms both in San Francisco and to a lesser extent in Los Angeles have bulk storage space which, however is maintained entirely for their private use.

CHARGES:

The factors that control the movement of grain are transportation facilities and transportation charges. To attract a flow of grain traffic there must exist at a port the facilities for handling grain efficiently. In this respect the facilities at New York, Baltimore and Philadelphia are kept on a practically parity basis. Exporters are always on the lookout for efficient facilities and speedy handling, so that the advantages offered by one port are quickly discovered and utilized. Keen competition leads to the equalization of these facilities between competitive points. The same keen competition has kept the port charges of different ports on a parity basis. A port that is handicapped by certain additional handling charges will have to reduce other charges so as to keep the total handling cost equal to that of its competitors. This situation may be illustrated by the following testimony: (46)

Q. Have you made any attempt to have the rate increased?

A. Yes, Sir.

Q. Has it met with any success?

A. No, Sir.

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(44) Oregon State Grain Inspection Department: Annual Reports.

(45) Bates, E. N.: Bulk Handling of Grain, American Elevator and Grain Trade, July 15, 1930.

(46) Testimony of Harvey C. Miller, president of the Keystone Elevator Company, Philadelphia, which is a contract elevator of the Penn. Railroad. I. C. C. Docket 12818, Keystone Elevator vs. Director Gen. as agent. Record, pp. 16-17 (1922).

Q. The Pennsylvania Railroad Company have refused to advance it?

A. The Pennsylvania Railroad Company have refused to advance it unless all other railroads advanced theirs proportionately. In other words, the other roads in and around Philadelphia, New York and Baltimore.

Q. The rate then is fixed generally for elevators in New York, Baltimore and Philadelphia?

A. Yes, Sir.

Q. And the Pennsylvania Railroad Company believed it impracticable to advance that rate?

A. Without the rest doing so.

The present status of elevator charges at important export terminals is as follows: (47)

	New York	Philadelphia	Baltimore	New Orleans
Receiving, Weighing & Storing initial period	¼ ct.	1 ct.	1 ct.	1¼ ct.
Free initial period	10 days	20 days	20 days	10 days
Storage for each succeeding day	1/25 ct.	1/25 ct.	1/25 ct.	1/25 ct.
Mixing in store	⅛ ct.	⅛ ct.	⅛ ct.	¼ ct.
Screening & Blowing	⅛ ct.	⅛ ct.	⅛ ct.	¼ ct.
Mixing, Screening & Blowing in one operation	3/16 ct.	3/16 ct.	3/16 ct.	
Turning in Store	⅛ ct.	⅛ ct.		¼ ct.
De-smutting & Scouring grain		2 ct.	2 ct.	1 ct.
Clipping Oats		½ ct.	½ ct.	
Cooling grain	½ ct.	½ ct.		
Reloading or Trimming Car		$1	$1	
Mixing at Delivery		Free	Free	Free
Drying	½ to 2½ ct.	½ to 2½ ct.		½ to 2 ct.

(47) Authority for the elevator charges:

New York: West Shore Railroad I. C. C. W. S. No. 5967; N. Y. Central, I. C. C. N. Y. C. No. 15379.

Philadelphia: P. R. R. Tariff 1145-A, I. C. C. 141.

Baltimore: B. & O. Tariff I. C. C. No. 21895.

New Orleans: Trans-Mississippi Terminal Railroad Tariff No. 32-H I. C. C. No. 19.

ELEVATION ALLOWANCES:

There are two kinds of elevation, one of which may be termed transportation elevation, consisting of passing of the grain through an elevator for the purpose of transferring it from car to car and obtaining its weight, and the other of which may be termed commercial elevation which involves various processes in the treatment of the grain itself, such as cleaning, mixing, clipping and drying. The first kind of elevation is an incident to the transportation of grain; the second to the merchandising of grain. It is difficult to separate the two forms of elevation. Both are parts of the general process. The same plant facilities, the same power, and the same labor is employed and the process of transfer and commercial process go on at the same time. It is likewise difficult to separate the different items of expense and say with confidence this belongs to transportation elevation and that to commercial elevation. The confusion of these two elements has at times resulted in discriminatory practices.

The Peavy cases (48) illustrate in a striking manner the practical working of elevation allowances and its consequences. In 1899 F. H. Peavy contracted with the Union Pacific to construct an elevator of about 1,500,000 bushel capacity at Council Bluff on the right of way of the Union Pacific. The railroad agreed to pay the elevator a charge of $1\frac{1}{4}$ cent per 100 pounds on all grain transferred. Similar arrangement was made at Kansas City between the Peavy interests and the railroad. It appeared that in addition to these two elevators the Peavy interests operated some 450 country elevators along the line of the Union Pacific and that they handled over 60% of the grain shipped over the Union Pacific Railroad. It was charged that the allowance of $1\frac{1}{4}$ cent per 100 pounds to the contract elevators for transferring their own grains amounted in its ultimate result to a rebate because in effect it reduced the through published rate in favor of the elevator company.

In making the arrangement the Union Pacific acted in good

(48) 10 I. C. C. 309; 12 I. C. C. 85; 14 I. C. C. 315.

faith and the facts indicated that 1¼ cent per 100 pounds was not an excessive charge for the service as conducted by the elevator company. "As a transfer proposition pure and simple" said the Commission, "taking into account the cost of these elevators and the expense of their operation, it would not seem to be attractive; by reason of its incidental aid to the extensive business of these grain merchants it is undoubtedly a very profitable arrangement. (49)

The real complaint in the case was not so much as to the amount of allowance granted as to the fact that competing carriers would be compelled to grant similar allowances at transfer points on their own lines. In its decision the Commission found that the amount of compensation paid was not unreasonable and that the injury resulting to rival carriers under the arrangement is something which the law does not seek to prevent.

The matter of allowances was reopened two years later (50) when the Commission reaffirmed the general principles of its former decision, but cut the allowance from 1¼ cents to ¾ cent per 100 pounds. In the words of the Commission : (51)

"We are satisfied from the facts acquired in this and other investigation as to the charges and practices at other points where large quantities of grain are handled and transferred, that an allowance of three quarters of one cent will fully and amply cover the actual cost of elevation contemplated in the law without returning a profit and thus becoming a rebate."

Upon the petition of the Chicago Board of Trade and numerous other protests the case was re-opened for the third time. (52) Further investigation of the actual operation of the contract between the peavy interest and the Union Pacific showed that a mere reduction in the amount of allowances did not suffice to cure the evil against which the complaint was made. The reduction

(49) 10 I. C. C. 309 (322).

(50) 12 I. C. C. 85.

(51) Ibid p. 90.

(52) I. C. C. 315.

ordered in the second decision was based on the theory that ¾ cent per 100 pounds was sufficient compensation for the elevation service without, however, returning a profit and thus becoming a rebate. Advantages which are unlawful may be enjoyed in ways that do not involve the direct payment of rebates, and the Peavy interests did not enjoy in the actual operation of their contract advantages which did not accrue to other shippers of grain. Weighing, inspection, mixing, conditioning and storage beyond the elevation period are commercial services and are in a sense part of elevation as defined in the act to regulate commerce. The allowances granted by the Union Pacific to the Peavy elevators were found, in the third decision, to constitute an undue preference and rebate unless confined to grain that was reshipped within the elevation period and had not been mixed, treated, weighed or inspected.

The decision of the Commission was appealed to the Circuit Court, which reviewed the contracts between the Peavy interest and the Union Pacific and the decision of the Interstate Commerce Commission in great detail. (53) The court was of opinion that it was not within the power of the Commission to attempt to regulate the measure of profits derived by shippers from the use of facilities of trade which were also used for purposes of transportation. The court held that if the carriers whose lines terminate at the Missouri River cities may not pay for this elevation in transit, they must either furnish it themselves free of charge or the producer and consumers whose grain passes over their roads must ultimately bear the expense of it. If they furnish it free or if they construct elevators and charge a reasonable compensation for it, the owners of the terminal elevators must lose business which in a large measure induced their construction. Enforcement of the order of the commission, in the opinion of the court, will result in great losses and entail much discrimination. "It will strike down the practice of a decade in reliance upon which elevators have been built, terminal grounds in large cities have been bought and equipped, contracts have been made, business and markets have

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(53) 176 Federal 409.

grown up and business relations have been established". (54)

This decision of the Circuit Court was confirmed by the Supreme Court. (55) Following the decision, the Commission modified its order so as to permit elevation allowances of ¼ cent per 100 pounds by railroads at Missouri River points when the grain is unloaded and reshipped within a ten day limit. (56) The scope of this order was later broadened to include Ohio River and Great Lakes points and points North of the Ohio and East of the Mississippi. In the order following this investigation, the Commission finds that the elevation allowance is intended to cover merely the passing of the grain through the elevator, and if the owner obtains storage or if the grain is subjected to any of the various commercial processes an additional payment is required. (57)

Under section 6 of the Interstate Commerce Act as amended, the carriers are required to publish and file regular tariffs designating any services such as elevating, storing, conditioning and other services which they provide in the course of transportation. When an elevation charge is absorbed, the publication of a through rate is sufficient authority for furnishing the transfer service free of additional charge. (58) When an additional rate is published, it is an indication that such services are additional to the line haul and are not included in the freight rates.

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(54) Ibid p. 426.

(55) I. C. C. vs Diffenbaugh 222 U. S. 42.

(56) 22 I. C. C. 505.

(57) 24 I. C. C. 201.

(58) Conference Ruling 59, 339.

CHAPTER V

OTHER WAREHOUSING AND STORAGE IN TRANSIT SERVICES.

In railroad warehousing as in other types of industry whenever there is a specific demand for certain services, some one appears to satisfy it. Refinement in storage services tends to increase. Long experience in the handling of a single commodity promotes specialization and competition among the carriers encourages further extension of services. The shipper of any commodity that calls for special cars selects the carriers which are specifically equipped for the purpose. As a result we have not only produce terminals to handle perishables, elevators to handle grains, but also cotton warehouses and compresses for cotton, tobacco stores for tobacco, bonded warehouses for bonded traffic and other storage and transit services to accommodate traffic of various kinds.

Cotton Warehousing:

Information received from the leading cotton carriers of the country indicates that the railroads do not own cotton warehouses to any appreciable extent. The Southern Pacific which transported over two million bales of cotton in the season 1928-29 and was considered the leading cotton carrier of the country, does not directly operate public cotton warehouses and compresses. (1) Warehousing and compressing services are furnished through arrangement with cotton compresses along its lines. In like manner, the Illinois Central, another cotton carrier of importance, has numerous independent companies operating warehouses and compresses on its line, including the Federal Compress and Warehouse Company, and the Union Compress Warehouse Company. (2) In the past some of the compresses were owned by

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(1) Letter from T. G. Beard, General Freight Agent, Southern Pacific Lines Houston, Texas, dated September 5, 1929.

(2) Letter from J. L. Sheppard, General Frt. Agent, Illinois Central, Memphis, Tenn, dated August 29, 1929.

the carriers, but this is no longer the case. (3) The carriers now have this service performed under contract with independent compress companies. Most of the cotton traffic is controlled by the cotton mills, commission merchants and co-operative societies. The mills build their own warehouses for storing the cotton which they buy for spinning. The commission merchants have built warehouses in order to aid their regular transactions. The co-operative associations, while having the authority to form subsidiary warehousing corporations, have not undertaken to provide their own storage space to any great extent. Public storage is provided by independent corporations or by municipalities.

The industrialization of the Southern states has given rise to new conditions in the warehousing of cotton. In 1840 out of a total production of 2,063,915 bales of cotton, 71,000 bales were consumed in the cotton growing states and 158,708 bales in the New England states; in 1929, the figures show that out of a total production of 14,296,549 bales, 5,392,265 bales were consumed in the cotton producing states, while only 1,447,451 bales were consumed in the New England states. (4) The trend of domestic consumption is due to the increase of the mills in operation in the southern states, especially in North and South Carolinas.

As a result of this change, cotton warehouses have been built at certain points in the Carolinas and later at Atlanta, Augusta and other Georgia points. (5) There Warehouses are of comparatively recent origin. The warehouses in Carolinas were first built because some of the mills in that territory were financially unable to carry large stocks of cotton and the warehouses were necessary to store and reship cotton to them as they needed it. Railroad tariffs were amended to provide that cotton could be shipped to these warehouses, there stored and

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(3) 146 I. C. C. 245, 251-52.

(4) Statistics on Cotton, Agriculture Year Book, 1930, Department of Agriculture.

(5) Augusta Cotton Exchange vs. G. F. Ry. I. C. C. Docket 16572 (1928) Testimony of Crane and Kerr, Record pp. 1598-1603, 1943-61.

subsequently reshipped to the mill points at rates based on the through rates from the point of origin to final destination plus a charge for storage or warehousing. (6) Under these arrangements cotton mills were assured of a cotton supply throughout the year without having to invest large sums of money for this purpose. Similar warehouse arrangements were subsequently extended to Atlanta, Augusta and other points in the southeast. The latter had their origin in conditions brought about by the European War when the price of cotton dropped to a ruinous level. The warehousing system was introduced to provide relief in the financing of cotton and to permit orderly marketing. Cotton was shipped to these warehouses and the growers were able to borrow money on their warehouse receipts. In other words, warehouse arrangements were originally established in the Carolinas to assist cotton mills which were financially unable to carry large stocks of cotton and were later established at other points to relieve a situation created by war conditions. Although the conditions giving rise to the warehousing arrangements no longer exist, these arrangements are still in effect. The warehouses are now being used by the large cotton merchants for concentration purposes as well as warehousing, that is, these merchants ship cotton from country stations throughout the cotton belt via concentration and compress points in the area of production to these warehouses and there, after sorting, and grading sell the cotton to the mills.

Cotton cannot be properly prepared for shipment by the grower due to the fact that the machinery for ginning and compression is costly and the unit of production is generally small. In consequence of this, after being picked the cotton is teamed by the grower to gins which are generally located near railroad stations, where the seed is removed and the lint is baled. These are known as flat or uncompressed bales and are shipped, or as expressed in the language of the cotton belt, "floated" to nearby concentration and compression points.

The rates on cotton are based on the assumption that the cotton is to be delivered at the destination points in standard compressed

(6) Ibid.

bales even though it is delivered to the carriers at the points of origin in uncompressed bales. The shipment is variously denominated as "compression in transit", "to be compressed at the expense of the carrier", "compression allowance rates" etc., with the carriers' privilege of compressing at any compress point that may be designated. If the bales are compressed before shipment, a differential in rate is granted. This differential pre-supposes that compression is done by and at the expense of the carriers. Through this arrangement the shipper is able to ship cotton from point of origin to final destination without sacrificing the through rate. The compresses are associated with warehouses at concentration points. Some storing at such time is inevitable, but further storage is necessary for the purpose of classification and concentration. Hence the compress points are usually the concentration as well as the warehousiug points.

Concentration privileges permit the shipment of a commodity from points of production to a concentration point, and reshipment to points of consumption under rates substantially lower than the full combination of rates into and out of the concentration point. The rail carriers of the South publish tariffs that provide for the concentration of cotton at designated centres for the purpose of marketing, storage, grading, assembling, marking, conditioning and reshipping. (7) When cotton leaves the hands of the grower it is in many instances ungraded. As the manufacturers demand only cotton of a particular quality, it is necessary for the cotton merchants and other middlemen to assort the ungraded bales as they flow from the plantation, and re-arrange them in commercial lots of uniform grade and quality. For this reason the Commission has expressed the opinion that concentration of cotton for the purpose of obtaining lots of uniform grade is a commercial necessity. (8)

Under tariff regulations, cotton may be stopped at concentra-

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(7) Southern Ry. System: Cotton Transit Tariff A-2, I. C. C. No. A-10272.

(8) 32 I. C. C. 461.

tion warehouses for a period not to exceed twelve months. (9) The period dates from the day of receipt at the transit station as established by the date on the original inbound freight billing. The cotton is graded as well as compressed at the point of stoppage. Its ultimate destination also is usually changed at the compress points. The identity of individual shipment is seldom preserved and ownership therefore is apt to change at the compress station. A certain amount of substitution at the concentration point is necessarily inherent in the system under which cotton is handled, but as the distance from the country station to the concentration points are short, the rates do not vary to any extent.

The through rates protected under the concentration arrangement are those in effect from the point of origin to final destination via the transit points, or the rates from the transit points to final destination, whichever are higher. Under the warehousing arrangements in Carolina and Georgia a second stoppage is granted so that the cotton may be stored in these warehouses. This stoppage privilege applies only when cotton is reshipped in carload lots from warehousing points. (10) The methods used in computing these transit freight rates provide either for a refund of the local rate to the concentration point upon payment of the through rate from points of origin to destination, or for the payment of a balance, which when added to the inbound local rate is equal to the through rate.

At Gulf ports the railroads publish tariffs for the storage of cotton in the open, in the yard or on the premises of the carriers. These rates are made "for the space rented and not for any warehousing facilities". According to Emerson's Tariff which publishes storage charges for all lines serving the port of New Orleans, the storage charges on export cotton are as follows: (11)

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(9) Southern Ry. System Tariff op. cit., I. C. C. A-10272, Supplement 9, Rule 18.

(10) Ibid, Rule 12.

(11) Agent Emerson's Tariff I-L I. C. C. No. 75.

Free Time Allowed	For Uncompressed cotton	For Compressed cotton
	2 days	4 days (domestic) 7 days (export and coastwise)
After Free Time		
5 cts. per bale to cover storage	4 days or less	2 days or less
10 ,,	8 ,, over 4	6 ,, over 2
20 ,,	13 ,, 8	11 ,, 6
25 ,,	18 ,, 13	16 ,, 11
30 ,,	28 ,, 18	26 ,, 16
1 ct. per bale per day after	28 days	26 days

Tobacco Warehousing :

While tobacco is grown in many states, over three quarters of the annual crop is grown in the five states of Kentucky, North Carolina, Virginia, South Carolina and Tennessee. (12) Practically every important tobacco section in these Southern States has its public warehouse situated in the nearest town or city. After the tobacco is cut it is sent to the drying plant and is graded. It is then packed in hogsheads, tierces or cases and the major portion of it stored in the warehouses for varying periods. It is a common practice to store unmanufactured tobacco for a year or more, a period considered desirable to permit it to "ripen".

Tobacco warehousing differs with other forms of warehousing in that the secondary functions of conditioning and selling are so important as to overshadow the primary function of storage. Every public or semi-public tobacco warehouse is a sales centre for the commodity. Only such portion as the owner wishes to sell comes to the city warehouses; the remainder is usually held in the country. The warehouses are either owned and operated by the large tobacco companies or by private concerns which do a general storage business. Except in Norfolk, Newport News and Baltimore where a large volume of export tobacco business is conducted, the railroads have no distinctive warehouses for tobacco storage. Tobacco is handled as any other commodity

(12) Statistical Abstract of U. S., 1930 p. 702.

through the regular established warehouses. (13)

The port of Hampton Roads, Virginia, which consists of Norfolk and Newport News, is an important centre of railroad tobacco warehouses and is the largest port in the United States for the concentration and storage of export tobacco. The annual shipments of tobacco to foreign ports through the port amount to 401,870,125 pounds or nearly 80 per cent of the entire tobacco export of the country. (14) Practically all of the tobacco passing through this port comes from Virginia, North and South Carolinas. (15)

The development of Newport News as a tobacco port was due in large part to the impetus given by the organization of the Tobacco Growers' Co-operative Association, which was organized in 1922 and included approximately 96,000 farmers in the States of North and South Carolina and Virginia. It early selected Newport News as its shipping point for the export of tobacco and although it was placed in the hands of receivers in June 1926, the impetus given to Newport News proved valuable in its later development as a tobacco port. In 1922 when the Association was first organized, Newport News exported 14,000,000 pounds of tobacco, but in 1923 it handled 50,000,000 pounds or about 26 per cent of the total 196,000,000 pounds handled by Norfolk across the bay. In 1929 the exportation through the two Hampton Roads Cities aggregated 401,870,125 pounds, of which Newport News handled 162,722,000 pounds. (16)

All the storage warehouses at Newport News are owned by the Chesapeake and Ohio Railroad but are leased to a private corporation, the Hiden Storage and Forwarding Company, and are

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(13) Letter from W. F. Wilson, General Freight Agent, Southern Ry. System Richmond, Va. dated August 27, 1929.

(14) Foreign Commerce and Navigation of U. S., 1929. pp. 325-326.

(15) I. C. C. Docket, No. I. & S. 2386, Tobacco Stored at Newport News, (1925) Record pp. 114-116, 121.

(16) Computed from figures in Water-borne Commerce of U. S., War Dept. Annual Report, Part 2 (1930).

operated by the lessee. (17) Tobacco is handled in casks and hogsheads which weigh from 50 to 1,500 pounds. The bulk of hogsheads is so great that large tracts of land are necessary for concentration purposes. The location of the warehouses at Newport News away from the waterfront, which enables concentration in one general location, and the absorption of transferring charge between the warehouse and the cars have made it possible for Newport News to divert a large share of tobacco traffic from Norfolk.

The largest warehouse in Norfolk is the so-called Army Base, leased to warehousing interest. It is located near but not directly on the waterfront, commodities being transferred between the warehouse and ships either in railroad cars or on small trailers pulled by a tractor. The Norfolk and Portsmouth Belt Line provides in its tariff for a charge of 25 cents for transfer between storage and shipside and an additional charge of ten cents for wharfage. (18) This means that after the storage is completed a tobacco shipper using the Army Base may have his tobacco transferred to shipside for a total of 35 cents per hogshead. In Newport News before the absorption tariff was in effect, the charges were 25 cents for outage, 25 cents for handling and 10 cents for wharfage. The absorption of the outage charge places the Newport News warehouses on an exact competitive position which the Army Base at Norfolk. (19)

At Baltimore, the Baltimore and Ohio Railroad built a tobacco warehouse in 1888 to handle export tobacco in that city, as the Maryland and Ohio export type of tobacco is marketed chiefly there. Before 1888 tobacco warehousing in Maryland was

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(17) Letter from L. C. Spengler, General Agent, Chesapeake and Ohio Rd. Newport News, Va. dated September 9, 1929.

(18) Norfolk & Portsmouth Belt Line Tariff I. C. C. 69, Item 405.

(19) The absorption of outage charge at Newport News gave rise to a controversy among the Southern carriers in 1925, because these carriers did not want to short haul themselves by moving tobacco to Newport News, a port served exclusively by Chesapeake and Ohio Railroad, see 102 I. C. C. 665.

conducted exclusively by the state and every grower of that state was obliged to ship his tobacco to the state warehouse where storage was given gratis. When the Baltimore and Ohio Railroad tobacco warehouse was established the state statute was modified so as to permit the grower to patronize either the state or the railroad warehouse at his option. The service offered by the Baltimore and Ohio warehouse includes inspection and storage. Inspection is done by railroad inspectors who break the contents of the hogshead into six even layers, and draw samples from each layer which are representative of the contents of the hogshead. These samples are sealed with a stamp bearing the name of the railroad and the marks of the hogshead from which the samples are taken. The hogshead is then recoopered and placed in storage. For the service of inspection, recooperage and storage for six months a charge of three dollars is made on each hogshead. (20)

Other Commodity Storage :

Besides grain, cotton and tobacco, there is a large number of commodities that call for specialized storage service; beans in Michigan and California, broom corn in Wichita and Oklahoma City, potatoes in Maine, popcorn in Iowa, kraut in central New York, canned goods in seaboard cities, and so forth. (21) It is impossible to list them all, the range is as wide as commerce itself. The railroad, however, is not interested in such specialized storage. With the exception of hay, which is handled through the "hay house system" in large cities, the remaining commodities are generally handled under the term of "terminal storage".

Hay is a bulky commodity, an average railroad car carrying only 10 to 12 tons. Its value is low and the area of production is extensive, almost as extensive as the areas of consumption. For this reason hay is distributed only over a short distance from the place of growth. It is inspected in the car by the prospective

(20) Interview with J. C. Brown, Warehouse Manager, Baltimore and Ohio Railroad, Baltimore, Md. December 20, 1930.

(21) Interview with H. S. Yohe, U. S. Warehouse Administration, Dept. of Agriculture, August 22, 1929.

buyers, and in big cities such as Baltimore, Philadelphia and New York there is a hay house system which is the trade name for hay warehouse. (22) These hay houses are either privately owned by the dealers or publicly operated by the railroad as hay terminals.

Bonded Warehousing:

Bonded warehousing is of two types: custom house warehousing and internal revenue bonded storage. A customs bonded warehouse receives its goods from the import trade. Internal revenue bonded goods are manufactured within the country. Both types of warehousing provide storage of merchandise for which some form of government tax has to be paid. The bonded warehouse or the bonded portion of a warehouse is barricaded. It is in charge of a "United States storekeeper" at the expense of the warehouseman. This storekeeper alone has access to the bonded goods and holds the only key to the Government's own lock, which, in effect, transform into governmental property whatever lies within.

The railroads are interested only in customs bonded warehouses. These bonded warehouses have been established in 106 of the 127 "ports" in the United States. (23) The warehouses are conducted by independent companies, but in a number of cases, as in Baltimore and Cincinnati, in buildings leased from the railroads. At ports where the railroad does not control a bonded warehouse of its own, its bonded traffic is sent to a bonded warehouseman with whom the railroad has a working agreement.

Bonded transportation of dutiable goods may be considered as another form of bonded warehousing performed by the railroads. In this case the railroad car serves as a warehouse on wheels. The car is bonded to cover goods in transit, and delivery is made not to the consignee directly but to the collector of customs at some inland "port", where the goods are held under government control until customs requirements are fully complied with.

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(22) Hay and Straw Delivery 51 I. C. C. 324 (Docket I. & S. 1159). Hay Inspection & Reshipment, 151 I. C. C. 425.

(23) Custom House Guide, 1930.

Under the present customs regulations, (24) bonded entries to interior points may be made at any time within one year after date of arrival, that is goods may remain in bonded storage at seaboard with the privilege of transporting them under bond to any interior custom house within the period of one year. Formerly the period was limited to ten days. This system of bonded transportation greatly facilitates movement of foreign trade. It relieves congestion and resulting delay at crowded seaboard customs houses and makes it possible for the importers at inland points to have personal conferences with the United States appraiser on controversial points arising from customs appraisals and arbitration. Through this system dutiable goods arriving in this country en route to a foreign country may be transported under bond to avoid the incidence of customs duty. Canadian grain arriving at Buffalo, for example, en route to England, need not be delayed by the customs officers. The collector merely permits it to move in bonded cars and to be warehoused in bond until delivery is made to the outgoing vessel.

STORAGE-IN-TRANSIT:

This is a service extended to shippers allowing certain commodities a stop-off privilege at the through freight rate for storage in warehouses or cold storage plants pending ultimate transportation to points of consumption. The primary reason why the carrier extends such service is to develop traffic, but the effect on commerce may be to encourage prompt delivery from producing points far removed from their markets, to relieve congestion and to reduce storage costs, or otherwise benefit a particular trade. It is an economic regulation of the flow of commodities from the farm, the packing house, or the factory to the consumer.

This service enables shippers to take advantage of through freight rates while holding back their goods en route until the place at which they are needed and the quantity required can be definitely ascertained. It is granted on most commodities of necessary to every day life such as sugar, flour, fish, cotton, coal etc. A general storage-in-transit tariff of a middle Western railroad

(24) As amended by Treasury Decision 39345, December 2, 1922.

enumerates 72 groups of commosities on which such an arrangement is in effect. (25)

The usual storage-in-transit arrangement implies that the commodities are stored in public or private warehouses at transit points and that the shipper will pay storage charges. This privilege merely authorizes a stop-off with subsequent reshipment under protected through freight rates.

The service places a premium on warehouses and cold storage plants located on railroad trunk lines at strategic points between the East and West. Such warehouses serve not only their local communities but also facilitate the movement of manufactured and imported merchandise moving West and dairy farm and packing house products moving East. They serve the purpose better than if they were located in big cities at terminal points where traffic is continually congested and where real estate values are often too high for economical operation. This condition has brought to the forefront the strategic position of the warehouse in the modern scheme of distribution. The rapid growth of cities and specialized industries is revolutionizing the warehousing industry and economic necessity demands that transportation and warehousing facilities keep up with the development. Storage-in-transit is an aid to such development and determines where plants should be constructed to link up a continuous movement of commodities.

Examples of storage-in-transit arrangement may be cited in the case of coal, cotton, import freight, etc. Shipments of coal in carloads, consigned to points of destination to which the rate from the points of origin exceed a specified minimum may be stopped off a intermediate points and stored. An extra fee is assessed for the storage privilege. A typical tariff, publishing regulations for the control of this privilege, provides that a transit fee of $3.60 a car shall be added to the through rate and sets a time limit of one year from the date on which the shipments were originally forwarded from the mines. (26) Coal moving under such an

(25) G. L. Wilson: Transit Service & Privileges, Ch. 1X. The Traffic Service Corporation. Chicago, 1925.

(26) Ibid.

arrangement is considered to be in the custody and possession of the owner while it is in storage at transit points. The carriers are not responsible for loss or damage while the coal is stored and the owner bears all expenses incident to storage, including handling, cartage and insurance.

Cotton is stored under transit arrangements at East St. Louis and Memphis for reshipment to New York, Baltimore, Boston and points on Eastern trunk lines. The carriers' charges are the through rates from points of origin to destination plus a storage-in-transit charge.

Goods imported through the Pacific ports may be stored at transit points in the midwest and subsequently reforwarded to ultimate destinations at the through rates from port of entry to destination. Over 60% of the merchandise imported from the Orient through the Pacific ports are stored in transit at Minnesota Transfer. (27) From this point the goods are distributed to jobbers and retailers throughout the territory to the South and the East. This arrangement has been of great service to the Pacific coast ports by aiding them to minimize the disadvantages of their geographical location and in building up routes via these ports to points in the South and East in competition with the Atlantic and Gulf ports.

The service of storage-in-transit entails additional expenses and disadvantages which do not attach to through shipments, including switching, detention of inbound equipment, absorption of outbound switching charges in certain instances and the expense of accounting for and readjusting revenues. (28) To justify the granting of such additional service the traffic must be of sufficient volume, the charge for the service must be adequate and the establishment of such service must result in operating economy to the carriers.

The case of Minnesota transfer (29) referred to above

(27) Investigation and Suspension Docket 1416. 68 I. C. C. 572.

(28) North Potato Traffic Asso. vs. G. N. Ry. Co. 58 I. C. C. 360, 364

(29) 68 I. C. C. 572.

illustrates the position of the Commission that, when there is sufficient volume of traffic, the Commission will order the maintenance of such service. In that case, proposal was made to cancel transit arrangements on import traffic moving from the Pacific coast ports to points North of the Ohio and Potomac Rivers and East of Mississippi River and to return to the combination rates which are higher than the joint import commodity rates applying from the ports to ultimate destination. It was necessary for import traffic to be stored somewhere after arrival and pending sale. The storage-in-transit service in Minnesota Transfer afforded the importers distributing points 1,900 miles nearer the principal points of consumption than the Pacific coast ports, thus expediting delivery. (30) The volume of traffic was increasing. Cancellation of the arrangement would operate to the injury of the established warehouses and would reduce the territory to which the importers could distribute from Minnesota Transfer and force them to carry stock at other points in order to continue the Southern trade. Under such conditions, the Commission felt that storage at Minnesota Transfer was of great advantage to transcontinental carriers and also to shippers and ordered the maintenance of such service.

Under section 15a of the Act of 1920 the authority of the Commission to prescribe just and reasonable rates is not a mere transitory authority to establish in the first instance a general rate structure calculated to produce a fair return, but a continuing authority to see to it that such rate structure shall not be undermined by increases or reductions, (31) such as may be occassioned by special transit services or privileges. For this reason the Commission has withheld approval in number of cases involving storage-in-transit privileges. In rules for Storing and Sacking Cement, (32) the Commission withheld its approval to the proposed transit arrangement for storage of cement at Davenport, Iowa, for the reason that such action would be followed

(30) Ibid.

(31) Trunk Line and Ex-Lake Iron Ore Rates 69 I. C. C. 589.

(32) 78 I. C. C. 693.

by demands at other important points and the competition among the carriers would "lead to the establishment of similar arrangements on such a scale as to undermine existing rate structure."

In withholding its approval for the establishment of storage-in-transit at Davenport. (33) The Commission had for its reason another consideration, that of economy in operation. Cement generally moves in carloads direct from manufacturer to point of consumption. It accumulates at the plants during the late fall and winter and moves in much greater volume during the remainder of the year. As compared with through movements, shipments taking transit require two additional services equivalent to terminal service; twice instead of once empty cars must be provided, and twice instead of once empty cars are returned to the carrier. Considered from an operating standpoint and without reference to car supply at the time of two separate movements, transit is wasteful of equipment. To justify the establishment of such transit, the resulting economy to one particular industry must not mean the impairment of service to the shipping public as a whole.

TERMINAL STORAGE:

Terminal storage is a form of warehousing service granted by carriers for the benefit of shippers or consignees. There are two reasons for this service: first, lack of store-door delivery service, and second, the necessity of assembling cargoes to await loading into steamers. In the absence of any arrangement whereby freight is taken directly on arrival from cars to the store door of the consignee, as in Canada and in England, the railroads are obliged to unload the freight and store it in their own freight stations until delivery can be made. The need to assemble cargoes for loading into vessels is another reason accountable for the need of terminal storage. The modern sea-going vessel transports such large quantities of goods, its own value is so great, and the expense of lying idle in port is so huge, that time of loading and discharge must be minimized. Detention of vessels at port is avoided by

(33) Ibid.

terminal storage. Here the cargoes are assembled, as in a reservoir, in readiness for quick loading.

For this service a charge is made on the commodities, the charge serving as a source of revenue and as a penalty to expedite loading. The Commission had frequently expressed the view [34] that the carriers are justified in establishing such car service rules as will tend toward the prompt release of equipment, and that storage and demurrage charges represent in part compensation to the carriers for the use of their equipment beyond a reasonable time, and in part a penalty for the failure of the shippers to act promptly in that direction. The business of the carriers is transportation and not storage. It is in the interest of shippers as well as carriers that all cars be released as promptly as possible.

Under section 4a of the Contract Terms and Conditions of the Carriers' Bill of Lading, property not removed by the party entitled to receive it within the free time allowed by tariff, may be kept in vessel, car, depot, warehouse or place of delivery of the carrier, subject to the tariff charge for storage and to the carrier's responsibility as warehouse man only. At the option of the carrier, the property may be removed and stored in a public or licensed warehouse at the place of delivery or other available place, at the cost of the owner, and there held without liability on the part of the carrier and subject to a lien for all freight and other lawful charges including a reasonable charge for storage.

By these terms the carrier is given the alternative of either removing the shipment to public storage or storing the shipment on the railroad premises. Under the first arrangement, the charges and services are governed by the customary practice of the public warehouses. [35] Public warehousemen are not amenable to the laws governing common carriers but their rates must by reasonable for competitive reasons. Under the second arrangement

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(34) Cleveland Salt Co. vs. Penn. Co. 34 I. C. C. 638 New Orleans Storage Rules & Regulations 28 I. C. C. 605 Blackman vs. So. R. Co. 10 I. C. C. 352.

(35) Supra. Chapter 2.

the rules of the carriers governing the storage of freight on railroad premises are published for account of a large number of railroads by the tariff bureau of the American Railway Association. A process of evolution has resulted in a degree of uniformity of rules and charges.

With certain exceptions [36] domestic freight, whether carload or less than carload stored on railroad premises, is governed by the provisions of the Uniform Code of Storage Rules and Charges. [37] Under this authority 48 hours free time is allowed on all commodities except explosives for the removal of inbound freight from car or railroad premises, or to complete a carload shipment and furnish forwarding directions. Outbound less than carload freight, not accompanied by proper shipping directions which will permit forwarding on date received, is subject to storage charges from the first A. M. after receipt of shipment with no free time allowance. For less than carload freight held to complete a shipment or for reshipment, 24 hours free time is allowed.

At the expiration of free time, freight, except automobiles and other self-propelling vehicles, is subjected to a storage charge of 1½ cents per 100 pounds for each of the first five days and 3 cents per 100 pounds for each subsequent day, with a minimum of 25 cents per shipment for freight held not longer than five days beyond free time and 50 cents for freight held six or more days beyond free time. Automobiles and self-propelling vehicles are subjected to a higher storage charge. Special regulations govern the storage of explosives and other dangerous articles to encourage prompt removal.

When carload freight is unloaded by the carrier for the purpose of releasing needed equipment, the storage charges will be the same as would have accrued under demurrage and track storage rule and the freight remained in the car. [38] When the

(36) Freight received from or intended for delivery to ocean or lake vessels at port of transshipment.

(37) Agent B. T. Jones Tariff I. C. C. 1491.

(38) Dodge Bros. vs. Director General 62 I. C. C. 689.

freight is unloaded on railroad premises at the request of consignee or consignor, the storage charge will not exceed the amount that would have accrued under the demurrage basis.

The Uniform Code of Storage Rules and Charges does not apply to exports and import freight at the port, or to domestic freight received from or intended for delivery to ocean or lake vessels at the port of transhipment. (39) At the port terminals where freight is transhipped between railroad and water carriers, special tariffs often extend the period of free time and lower the charges for storage to equalize port competition.

For the North Atlantic ports the storage rates at Philadelphia may be taken as representative. With the exception of coal, coke and grain, export carload freight is held free in warehouses or in cars 10 days, and less than carload freight five days, exclusive of the day of arrival. (40) The 10 days allowance is extended to 15 days under a tri-party agreement made between the Shipping Board, the railroads and practically all steamship lines operating at North Atlantic ports. Under this agreement through export bills of lading are issued only when found on written ocean contract and when the shipper has guaranty that any storage charges accruing at the port will be paid. After the expiration of the 15-day free time period, storage and demurrage charges provided by the tariffs of the rail carriers in effect at the port of export are assessed. Such charges cease to apply when the delay is due to the default of the rail carriers. Freight for transshipment by vessel in the coastwise trade is allowed but five days' free time. At the expiration of free time the storage rate is computed in 10-days periods, and for most commodities the rate is 1 cent per 100 pounds for the first 10 days and ½ cent per 100 pounds for each succeeding 10 days or fraction thereof. (41)

In contrast with the North Atlantic ports, the South Atlantic and Gulf ports offer greater attraction in the form of

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(39) Agent T. B. Jones 1491 Rule I Section D.

(40) Pennsylvania Rd. Tariff G. O. I. C. C. 12518; Phila. & Reading Tariff I. C. C. J-8282; B. & O. Tariff I. C. C. 18686, 18691.

(41) Ibid.

lower storage rates. At these ports after the ten days of free time, storage is computed on a 30-day period as compared with the 10-day period of the North. For most commodities the storage rate is 1 cent per 100 pounds for each 30 days, [42] which except for short time storage is exactly one-half of what is charged at the North Atlantic ports.

At the Pacific ports the storage rate is based on the ocean freight unit, the ton. It is a unit of 2,000 pounds or 40 cubic feet as compared with the 100-pound unit of the Atlantic and Gulf ports. The usual 10 days free time granted by the railroads to export traffic are extended to 20 days at municipal docks. Justification for such extension is based on the fact that sailing of vessels are not so frequent at the Pacific ports as at the North Atlantic ports. Longer intervals occur between the dates when the cargo may be moved from warehouse or car to vessel. In recognition of this fact, the railroad tariffs, under specific conditions provide that rail carriers will allow carload freight covered by through bills of lading, a period of not exceeding 20 days' free time at the Pacific Coast ports of export after the declared first loading of the vessel on which it is booked. [43]

Import freight is subject to storage charges in the same manner as export freight except that the operation is reversed. Import package freight, in transit or awaiting reshipment, is held free from 10 to 15 days after the vessel completes discharging the cargo. Import bulk freight is generally held free for five days. The storage rates are identical with those applicable to export freight moving in the opposite direction.

Import freight is stored at the owner's risk. The railroad's liability as a common carrier has not begun until the goods are "delivered to the carrier". The storage interim between vessel and railroad is considered as an accommodation to the owner. In like manner the railroad's liability as a common carrier ceases

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(42) Agent J. H. Glenn's Tariff, I. C. C. A-439; and Agent Emerson Tariff I. C. C. I-L No. 75.

(43) Agent R. H. Countiss Westbound Export Commodity Tariff, I. C. C. 1152.

when it has delivered an export shipment at the usual and customary place for unloading, and has given notice and allowed reasonable time for unloading. (44) The storage interim between vessel and railroad is not fully protected by the through export bill of lading.

YARD AND GROUND STORAGE:

Yard and ground storage is another form of terminal storage, but it is afforded in the open. This service offers the shippers of low grade commodities which are not subject to weathering, an opportunity to stop goods at the terminals while they are awaiting a domestic or an export market. This service adds to the flexibility of the movement of commodities and provides cheap storage while the goods are awaiting movement. It conserves the carrier's equipment by releasing the cars promptly, and relieves the shippers of heavy demurrage charges.

Coal, ore, lumber, building materials, bricks and heavy machinery rank high in yard and ground storage. In this form of storage, it is presupposed that the land is fenced or suitably surrounded by some enclosure. Reasonable protection, varying with the nature of the commodity, must be given against theft and in some cases fire.

After the expiration of free time which usually is 48 hours for domestic and 5 to 30 days for export shipments, the railroad has the right to hold the freight in the car or to unload it at its option. In either case, the charge will be based upon the demurrage rate unless a written request to unload the goods and store the freight is made of the carrier by the shipper or consignee within the free time period. Such charges have been sustained by the Commission in various cases. (45) The underlying principle is that such charges are imposed not primarily to produce revenue, but to accomplish a specific purpose such as the prompt removal of freight from the carrier's premises. If the purpose is reasonable

(44) Chicago etc., R. Co. vs. Bensley 69 Ill. 630; Loeb vs. Wabash Ry. Co. (Mo App.) 85 S. W. 118.

(45) Kidston & Co. vs D. L. & W. RR., 74 I. C. C. 139.

and the charges are no higher than necessary to accomplish it, the charges are reasonable. (46)

The charges for yard and ground storage are combined with handling expenses. They are made purposely attractive to encourage the prompt release of railroad equipment. Hence the rates are appreciably less than car demurrage at ports, which is in the East $2 per day for the first four days and $5 per day for each succeeding day; and on the Pacific Coast $3 per day straight. The handling and ground storage charges are made on a much lower scale. In consideration for the low storage charges the railroad's liability as warehouseman usually is limited. In some cases the articles are stored at the owner's risk as to loss or shrinkage. In other cases the company is relieved of responsibility as to theft, decay or damage due to the elements.

Ths increasing volume in the export of iron and steel articles has made ground storage an essential factor in cargo handling at ports. These articles include a great variety of heavy machinery and machine parts such as armour, ship plates, boiler tubes, locomotive parts, castings, pig iron, pipes, rails, turn tables, etc. They lend themselves to handling without injury and are not subject to weathering. Storage in the open releases railroad equipment without at the same time clogging the transit shed.

Ground storage under roof is a form of storage offered at some railroad terminals for the storage of oil in barrels, paper, pulp, and semi-hazardous articles. In this type of storage the commodity is stored on the ground but within the walls and under the roof of a building. The storage rate runs midway between warehouse and open storage.

Terminal Storage Charges:

The carrier's legal obligation as a common carrier of carload freight and the rate paid for transportation include tender or placement of the car, reasonable time for loading or unloading in addition to the actual movement of the car from the point of origin to the point of destination. In other words the so-called "free

(46) Ibid.

time" is not a gratuity. Payment for it is included in the freight rate. The railroad's liability as a common carrier ceases when it has delivered the shipment at the usual and customary place for unloading, has given notice and allowed reasonable time for unloading. (47) The transportation rate does not cover car detention for any purpose other than those directly incident to loading and unloading. The rate does not include payment for the use of the car for storage or warehousing purposes, for testing or analysis of the contents, or for arranging for its disposal. (48) For all detention of cars beyond the limit of "free time", charges are made in accordance with the provisions of the carriers' tariff.

The rates must be "reasonable and just." By Section 1 of the Interstate Commerce Act, storage is named as a service in connection with transportation and the charges therefore are required to be reasonable and just. A schedule of rates is required by Section 6 of the Act to be printed, posted, and filed with the Commission. This schedule should state among other terminal charges, the charges, rules and regulations, if any, of the carrier in relation to storage. (49)

Although the rates must be "reasonable and just", yet they are not to be gauged by the charges of the public warehouses. In Blackman vs. Southern Ry. Co., (50) the complainant attacked the storage charge of the defendant carrier on freight while in its freight warehouse at Macon, Georgia, as unreasonable. The reason was that it exceeded the charges that would have been exacted had the freight been in a public warehouse. In dismissing the complaint the Commission recognized the functional distinction between a railroad freight depot and a public storage warehouse and justified a higher charge in case of railroad storage: (51)

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(47) Chi etc. RR vs. Bensley, 69 Ill 630; Porter vs. Chicago etc. RR., 20 Ill 409.

(48) See New Orleans Storage Rules and Regulations, 28 I. C. C. 605.

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(50) 10 I. C. C. 352.

(51) Ibid p. 358.

"A railroad freight depot and a public storage warehouse are buildings whose business and use are wholly dissimilar. The former is planned and built to accommodate the current business of the road when expediously handled, and offered no facilities for storage during long periods of time. The storage warehouse is especially designed for storage purposes. The railway company imposes storage charges, not for gain especially but in order that it may be enabled to clear its depots to the end that current business may not be blockaded. That this may be effected it is, in our view of the matter, justified and necessary to impose a rate higher than that fixed by the public storage warehouses, and if this was not done, there would be no inducement for the removal of goods from the depot to the public warehouse. The business public is as much interested as the railroad in having goods removed from cars and depots within a reasonable time after they reach their destination."

"Another fact which renders storage in a railway depot expensive and risky is, that owing to the daily movement of goods into and out of the depot, goods in storage are subject to the risk of damage which often results in loss to the railroad as well as to the owner of the goods."

From the above opinion it is evident that carriers' storage charges are intended to prevent the accumulation and congestion of freight by inducing prompt removal from the carrier's premises. They are not ordinarily imposed for profit. The charges imposed by public warehouses afford no fair criterion of the reasonableness of a carrier's charges, nor is the value of the service rendered conclusive. (52) The accomplishment of the primary purpose, that is, prompt removal from carrier's premises, is the controlling consideration. To this end it was held to be reasonable to subject the storage of explosives and other dangerous articles to both demurrage and storage rules. (53) In another decision the Commission held that ground storage might be charged on a demurrage basis. (54)

While storage charges may be fixed for the purpose of encouraging removal, the charges must apply to all shippers alike without discrimination. An exception in the tariff providing that

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(52) Cleveland Seth Co. vs. P. R. R., 34 I. C. C. 638.

(53) Pitts. C. C. & St. L. Ry. vs. Freedom Oil Works, 247 Fed. 573.

(54) Dodge Bros. vs. Director General, 62 I. C. C. 289.

certain commodities may be stored free in case the owner secure permission from the proper officers of the carriers, is objectionable inasmuch as it is left to the discretion of the officer as to whether the privilege should be enjoyed. (55)

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(55) Storage Charges in Central Frt. Asso. Territory, 28 I. C. C. 372, 375.

CHAPTER VI

FACTORS INFLUENCING RAILROAD WAREHOUSING OPERATION.

What will be the future trend of railroad warehousing? To answer this question, an attempt must be made to analyze the legal and economic factors underlying the operation of warehouses by the railroad. In this connection, it must be remembered that such an attempt is venturing into the confusing law of social relationship where the causes are also effects and effects causes, and where either one may start as one and presently become the other. Thus the increase in railroad traffic gives rise to railroad worehousing, and the improvement in warehousing service helps to further develop railroad traffic. The fruitful way to consider the future trend of railroad warehousing is, therefore, to examine the more important factors which make it necessary for the railroad to operate warehouses, giving heed to the permanency of such factors. These factors may be grouped under four main heads: (1) to fulfil legal obligations, (2) to meet competitive situations, (3) to meet marketing changes, and (4) to take advantage of air rights in the terminal areas.

1. To fulfil legal obligation:

By the Hepburn Amendment, the definition of the term "transportation" in the Act to Regulate Commerce was enlarged so as to include "all services in connection with the receipt, delivery, elevation and transfer in transit, ventilation, refrigeration, or icing, storage and handling of property transported", and the law made it the duty of every carrier subject to the provisions of the Act to "provide and furnish such transportation upon reasonable request therefor". (1)

From this and other provisions of the Act, it is evident that Congress recognized that the duty of the carriers to the public included the performance of a variety of services that, according

(1) Section 1, paragraph 3 & 4 of the Act to Regulate Commerce.

to the theory of the common law, were separable from the carrier's service as carrier, and in order to prevent overcharge and discrimination from being made under the pretext of performing such additional services, it provided in the Act that so far as interstate carriers by rail were concerned all such additional services should be included under the single term "transportation" and subjected to the provisions of the Act respecting reasonable rates and the like. The term "storage" was included within the term "transportation". Car service and demurrage rules, storage and handling rules, together with regulations defining delivery to consignees have recognized the need of storage incident to transportation. It is a necessary corollary that such storage incident to transportation is a part of the transportation service and the railroad is bound to furnish such service upon reasonable request therefor. It is to fulfil this legal obligation that the railroad is bound to furnish storage service.

However, not all storage of property transported may be considered as a part of the transportation service. Storage is a transportation service only to the extent that storage is necessarily incidental to transporting such property, and the term has been used in Section 1 of the Act in the limited sense. (2) As was said by the court in State vs. Southern Pacific Company: (3)

"We think that the storage of goods by a railroad in its warehouses, as a matter incidental to its business as such, contemplates and looks to a rotation of storage as immediate and prompt as railroad corporation can make it.....To be incidental business, the storage must be preliminary either to immediate transportation or immediate removal."

This is the demarkation between storage as a part of the transportation service and storage as a commercial service, To be a part of the transportation service, the storage must be preliminary either to immediate transportation or immediate removal. As set forth in the "Contract Terms and Conditions"

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(2) Guaranty Claim Elevator Company, 72 I. C. C. 175, 176.

(3) 52 La. Ann. 1822, 28 So. 372, quoted with approval by Interstate Commerce Commission, in 72 I. C. C. 175.

of the carriers' bill of lading: (4)

"Property not removed by the party entitled to receive it within the free time allowed by tariffs, legally on file (such free time to be computed as therein provided) after notice of the arrival of the property at destination or at the port of export (if intended for export) has been duly sent or given, and after placement of the property for delivery at destination has been made, may be kept in vessel, car, depot, warehouse, or place of delivery of the carrier, subject to the tariff charge for storage and to carrier's responsibility as warehousemen only, or at the option of the carrier, may be removed to and stored in a public or licensed warehouse at the place of delivery or other available place, at the cost of the owner, and there held without liability on the part of the carrier, and subject to a lien for all freight and other lawful charges including a reasonable charge for storage."

From the construction of the above paragraph it may be said that transportation service terminates with the expiration of the "free time" period, after which the railroad has the right to remove a shipment from its premises and place it in public storage where it will be held without liability on the part of the carrier and subject to a lien for all freight and other lawful charges including a reasonable charge for storage. If the carrier did not have the privilege of placing goods in public warehouses, freight stations would become so congested with undelivered freight as to make them unavailable for the receipt and delivery of shipments, a condition which could not be tolerated by either the carrier or the shipping public.

"Free time" period is camputed from the first 7 A. M. after the day on which notice of arrival is sent or given to consignee. (5) Common carriers by rail are not required to deliver goods to the consignee at his house or place of business. (6) The general rule to deliver the goods to the consignee at his place of business

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(4) Section 4 (a) of the Contract Terms and Conditions of the Uniform Bill of Lading.

(5) Agent T. B. Jones Tariff, I. C. C. 1491, Rule No. 4.

(6) Bansmer vs. Toledo & Wabash Ry. Co., 25 Ind. 434; 87 Am. Dec. 367; Chi. etc RR. v. Bensley 69 Ill. 630; Porter v. Chi. etc. RR. 20 Ill. 407.

is not applicable to common carriers by rail. (7) Cars on a railroad are necessarily confined to the track of the road, and unless the consignee has a warehouse immediately by the track, an actual delivery cannot be made without a change in the means of transit. The very nature of this mode of carriage makes it necessary that freight depots be erected at places where goods are received and discharged. If the consignee is not present to receive the goods, the carrier may relieve himself of further liability by notifying the consignee of their arrival and allowing reasonable time for him to prepare to take them away, or if the consignee cannot be found by having them stored in a proper warehouse for him. The goods must be stored, because the carrier cannot abandon the goods. (8) When the goods are thus safely stored, the liability of a warehouseman attaches to the railroad: during this time railroad is only liable as a warehouseman for the want of that degree of care and diligence incident to that relationship. (9)

From this view of the duty of the railroad, there result two distinct liabilities: first, that of common carrier; and second, that of warehouseman. The obligation of each is regulated by law. (10) As a common carrier the railroad is bound in the same position as an insurer of the goods to cover all risk of loss, except loss due to the acts of God or to public enemies. (11) With these exceptions, the railroad is liable and must bear the loss, although the loss may have resulted from a cause for which neither the railroad nor any of its servants is in any degree chargeable. This stringent rule of the common law is founded in necessity, arising from the nature of employment, as a protection against fraud of which it would seldom be possible to adduce legal evidence. On

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(7) Ibid., see also Transfer at St. Louis, 155 I. C. C. 129; re Bill of Lading 52 I. C. C. 671, 719.

(8) St. Louis etc. R. vs. Scarborough Co. 115 Ark. 14; 170 S. W. 572 Chi. etc. R. v. Pfeifer 90 Ark. 524; 119 S. W. 642.

(9) Southern v. Prescott 240 U. S. 632; American Paper & Pulp Co. v. B. & O. Rd. 41 I. C. C. 511.

(10) Southern v. Prescott, 240 U. S. 632; Blackman vs. Southern, 10 I. C. C. 352; Hardman v. Montana U. R. Co. 83 Fed. 88.

(11) re Bill of Lading 52 I. C. C.

the other hand if the goods are stored by the railroad at the expiration of the "free time" period, the common carrier liability ceases, and the railroad continues thereafter to have possession of the goods in the capacity of a warehouseman and is responsible for the care and diligence attached by law to that relationship. (12)

This distinction is clearly illustrated in the case of Southern Railway Company vs. Prescott. (13) In this case, the consignee paid the entire freight charges after the arrival of the goods, and took away four of the thirteen packages constituting the shipment. The railroad agent consented that nine packages might remain to meet the consignee's convenience in removal. Before the packages were called for, the railroad's warehouse with its contents, including the nine undelivered packages, was destroyed by fire. The Supreme Court held that it was explicitly provided in the carrier's bill of lading that in case the property was not removed within the specified time it should be kept subject to liability as warehouseman only. The railroad was therefore liable only in case of negligence.

The function of a common carrier is to receive, transport and deliver. (14) In connection with receipt and delivery, some storage is necessary. It is to fulfil this function of the common carrier that the railroad provides space for storage. In addition to fulfilling the legal requirements, the railroad is often forced into the position of a warehouseman through the lack of diligence on the part of the consignee in the removal of property and through the desire to offer better service as a means to meet competition.

2. To meet competition:

a. Rail Competition:

The history of the railroad in the United States may be written in one word, competition. From the period of early rate wars through periods of pooling agreements and government regulation, the motive of competition permeated all railroad

(12) Am. Paper Pulp Asso. vs. B. & O. 41 I. C. C. 511.

(13) 240 U. S. 352.

(14) American Warehousemen Asso. vs. Ill. Central, 7 I. C. C. 556, 589.

activities. In this competition it has been thought necessary to give the shippers better facilities and more flexible service, the importance of which they have been quick to appreciate. The railroads are all engaged in developing, or at least in retaining, the traffic of their respective lines, and since the offering of pecuniary consideration in the form of rebates is prohibited by law, (15) competition takes the form of service. There are many devices which ingenious men have developed for the securing of traffic by the granting of special service, of which warehousing is one. Practically all attempts of the railroad in building warehouses, produce terminals and grain elevators are traceable to the desire to gain or retain traffic. This may be proved from statements of the railroad officials. (16)

Q. Does the Missouri Pacific line own the Appalachian depot or is it a public warehouse in which they have rented some space for storage purposes?

A. The Appalachian warehouses are a public warehouse. However the Missouri Pacific Railroad has a lease on certain facilities at the Appalachian that permits of their use of the facilities as a depot. Now that depot is not confined to the handling of import traffic. They handle some domestic traffic. They handle domestic traffic in that facility in addition to storing import business.

Q. Why do you store import freight at the Appalachian warehouses, rather than at your own terminals at West Wego?

A. That was brought about to meet competitive conditions created at this port by other lines, and additionally to meet competitive conditions existing at North Atlantic ports."

In another inquiry the testimony of a traffic official indicated that competition prompted his line to inaugurate constructive

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(15) Sections 2 & 3 Act to Regulate Commerce as amended.

(16) Testimony of C. W. Brosius, General Frt. Agent, Texas Pacific-Missouri Pacific at New Orleans in I. C. C. Docket 12681 Record pp. 5803-04.

station service which included the use of trucking and merchandise warehousing. (17)

A. We filed our tariff to be effective on January 15, 1927, providing for the constructive station arrangement, also trucking in lieu of lighterage.

Q. Well, now, what was the reason that prompted the Jersey Central to go into this practice?

A. We had stood by for a number of years, and seen all the other New York Harbor lines going into such arrangements, and we continued to wait until the Pennsylvania Railroad concluded to file their tariffs, to become effective on January 1, 1927, and then we felt we could not stay out any longer, that our line should be on a competitive basis, so far as we were able to put it there.

Q. Then the sole motive that you are suggesting is competition?

A. Yes, Sir.

The same situation exists in the building of produce terminals by the railroads. In 1926 the Baltimore and Ohio opened a four million dollar produce terminal in Philadelphia. Six months later the Pennsylvania Railroad opened a ten million dollar terminal in the same city. Either one is sufficient to care for the entire perishable traffic. (18) In New York the Pennsylvania Railroad, after spending more than two million dollars in enlarging and improving its produce piers, was followed immediately by the Erie Railroad improvement amounting to a million and a half dollars. This competitive building is due to the relentless competition between the carriers coupled with the individualistic policy of the railroads in avoiding joint use of terminal facilities.

The building of grain elevators may be explained by the same

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(17) Testimony of Arthur Hamilton, vice president of Central of New Jersey, I. C. C. Docket 19715 re Off Track Stations in New York, Record pp. 568-70.

(18) W. P. Hedden: How Big Cities are Fed. p. 274.

motive, that of traffic expansion. As testified by a traffic official, (19)

".....Our elevator was the first elevator of any magnitude to be built here. There were no transferring facilities, and the non-originating roads built elevators to attract grain away from the other railroads, and to do this they had to give concessions of some description.

Commissioner Clark: And all these allowances and privilege are in line of inducement?

Mr. Flack: I think so. I do not see any object in putting up an elevator here unless it would be to get grain to go there."

In the leasing of elevator and other property, the railroad considers traffic as one of the primary considerations. In most of such leases the lessor railroad usually reserves the exclusive right of carrying freight to be transported to or from the lessee's buildings. (20) Thus warehousing properties have been largely used by the railroads as an instrument in traffic development.

b. Motor Competition :

In 1925 the Pennsylvania Railroad made a comprehensive survey of the volume of freight and the approximate revenue which it was losing as a result of truck competition. The survey showed that approximately $27,000,000 a year had passed from the railroad to the trucks. (21) Analysis further showed that the reason this freight was diverted to the trucks was because, in the use of trucks, pick-up and store-door delivery was possible—the time factor was also an element entering into the proposition. This led to the conclusion that in order to meet motor truck competition the railroad must render the same or better service than that of its highway competitors. Every attractive feature

(19) Testimony of Geo. B. Flack, Secretary of Midland Elevator Co., in Inquiry by I. C. C. into the relation of common carriers to the grain trade, Senate Document 278, 59th Congress, p. 287.

(20) Northern Pacific Ry. Co: Grain Elevator Lease form R. W. 3, Clause No. 6.

(21) Testimony of J. F. Deasy, assistant to vice president in charge of operation, P. R. R. in I. C. C. Docket 21723 (1930) Record, pp. 532-533.

offered to the shippers by independent motor truck lines must be duplicated or improved upon by the railroad if the loss of freight traffic to the highway is to be stemmed.

In an endeavor to retrieve some of the business, the rail lines have adopted a number of measures which have direct relation to the operation of warehouses. Among these measures are the inauguration of constructive and off-track stations, container car service and store-door delivery service.

Under the principle of constructive station operation, (21a) the railroad holds itself out to render for the public the service between its rail heads and the inland points, which it has designated in its tariffs as constructive stations. The truckman takes the freight from the rail heads, and, acting for the railroad, hauls it to the constructive station point, at which point, however, there is no actual station or physical transfer of freight. From the constructive station point on, the truckman is employed by the shipper and hauls the freight for the shipper between such point and the shipper's place of business. The railroad employs and pays the truckman compensation for the service between the rail head and the constructive station and the shippers pays the truckman for his service between the constructive station and his place of business. The constructive station service is really a modified form of store-door delivery of freight, the only difference being that in store-door delivery the carrier assumes the responsibility to the ultimate delivery point, whereas in connection with the constructive delivery station this responsibility is divided at a constructive point reached by the motor truck and placed so as to comply with the carrier's tariff obligation.

The off-track or inland station is an actual station off the rails of the railroad and is usually operated by a warehouseman or truckman. The railroad holds itself out to render service for the public between its rail head and the inland station. The warehouseman acting for the railroad, hauls the freight from the rail head to the inland station, where delivery is made to the

(21a) Constructive Station was discontinued under I. C. C. Docket 19715.

shipper or his agent, and frequently the freight is stored in the warehouse operated above the inland station for the account of the shipper. The shipper employs pays the warehouseman for the service subsequent to the delivery at the inland station.

The operation of the constructive and off track stations is intimately related to warehouse operation. In most instances a warehouseman or a truckman is employed to haul the freight between the rail head and the station. The first floor is considered the station of the carriers, the floors above being used by a warehouse company in its business as warehouseman. Obviously the warehouse company which conducts a private warehouse business is enabled, under this arrangement to save all cartage expense that other warehouse companies not participating in this arrangement with the railroad must pay. To express the thought more accurately, shippers and consignees, who use for private storage the warehouses in which freight stations are conducted, are at no expense for cartage, while the merchants who use other warehouses must pay the cartage charge.

In New York all the inland stations are located in buildings in which Independent Warehouses Incorporated, a subsidiary of the United States Trucking Corporation, operates public warehouses on the upper floors. After freight is delivered at an off track station, a consignee has 48 hours free time to take it away. If Independent Warehouses, Incorporated, acting as agent of the consignee, has instructions to put it in storage, the employees of that company take the freight from the platform or floor of the station to the upper floors which it is operating as a warehouse. Sometimes, the Trucking Corporation, in its capacity as agent to the carrier, has been notified in advance of the arrival of the freight at the station that the consignee wants it stored in the warehouse above the station. In such cases, the employees of the Trucking Corporation, acting as agent of the railroad, unload the freight from the truck to the platform of the station and the employees of Independent Warehouses then take it to the elevators by which it is elevated to the upper floors.

Through the use of the constructive station and off track stations, it is possible for the railroad to offer practically the same

kind of service that was formerly limited to the motor carriers, namely, a modified form of store-door service, storage beyond free time, distribution of carload and less-than-carload freight and expedited less-than-carload freight delivery. There is, however, a certain danger of discrimination in connection with constructive delivery and off track station services. Freight consigned to a constructive station must be consigned in care of the contract warehouseman or contract truckman and a prerequisite to this is the concluding of a contract between the consignee and the warehouseman or truckman for delivery beyond the constructive station. No assurance of uniformity of rate beyond the constructive station is possible under the circumstances. Large shippers, or shippers having an attractive business, can be solicited by a contract warehouseman under the constructive station arrangement with the persuasive factor of the warehouseman's desire to secure local profitable business. In connection with designating an off track station, the Commission should require that the carriers show the necessity therefor prior to the establishment of such, with a view to prevent designating a warehouse as an off track station, solely with a view to serving special interests. The establishment of an inland station, which is instituted solely to enable a warehouse located above a station to obtain business, is unlawful because discriminatory. The same would be true of the establishment of an inland station in premises used preponderantly by a single shipper.

Container car is another facility that has vital relation with warehouse operation. Two conditions with which the railroad found itself confronted led to a study of the container car system for handling less-than-carload freight. The first of these conditions, for which no satisfactory solution has been found, was the serious, continued and ever growing loss of the short haul merchandise to the motor truck. The second condition is in reality embraced in the first and might have been passed by except for the fact that truck competition, with its pick-up and store-door delivery system, had emphasized the cumbersome and uneconomical system under which the railroads handle merchandise freight, using methods which have not been changed in any material manner for the past fifty years.

Packages of various kinds, shapes and sizes are today delivered to the railroad at the railroad station, and after unloading from shippers' trucks are handled by railroad labor and loaded either directly into a car, or more frequently trucked to and stored in the car. Due to limitation of available space, particularly at large terminals, the freight must often be loaded into the car currently as offered, which frequently results in an ill-assorted and badly loaded car because it is not possible to resort and properly load the freight to the best advantage under such conditions. The freight thus loaded into the car is transported to destination or the break-bulk station and there checked and unloaded, placed in freight houses and later picked up again and taken to the doorway for delivery to the consignee truck; often the freight is transferred en route, an intermediate checking, unloading and rehauling being necessary.

When the merchandise is moved through the motor carrier, a door-to-door service is performed. Normally this means two handlings—one at the door of the shipper, the other at the door of the consignee. It means a great saving to the shipper in trucking, loading and unloading. Under the present practice of assessing rail freight plus the content, the annual freight bill on package lumber is enormous. The packing requirements imposed by the consolidated classification necessitate careful protective packing.

The situation is partly remedied through the use of the container car in co-operation with a forwarding or warehousing company. The container car uses a unit container for the handling of merchandise. These containers are large boxes of steel into which the freight is loaded at the shipping platforms of the manufacturer. The container is then locked or sealed, hauled by truck to the railroad, and there transferred to a railroad, car. Many small shipments may be consolidated into a single container up to its capacity of 7,000 pounds, with a certainty that on hand will touch a single package until it is unloaded at the receiving sill of the consignee at destination. Interior packing may be minimized, handling is eliminated, theft or pilferage has proven to be absolutely impossible—so impossible, that on railroad has yet

received claim. [22]

As set forth in a published announcement of the Pennsylvania Railroad, [23] this service is to make available to shippers the full co-ordination between motor truck and rail facilities and to meet the needs of shippers and consignees who desire to be relieved of handling their shipments between railroad terminals and their places of business. In this form of service the motor trucks do their work entirely within the terminal zone. Their function is to act as collector and distributor of freight between the railroad station and the business places of shippers.

The railroad makes arrangements by which shippers utilizing the new service may, if they so desire, avail themselves of the facilities of a contract forwarder which operates warehouses in all its terminals. This organization will collect shipments at various points of origin by making day to day calls with containers carried upon their trucks. When the containers are loaded, they will be placed by cranes upon flat cars awaiting them at designated stations and will be moved through to destination on scheduled trains with other freight. Upon termination of the run, the forwarding company, for consignees who so desire, take possession of and deliver the freight to the consignee's door, or store the freight in its warehouses for future delivery. These supplementary services are, however, entirely optional with both shippers and consignees who are free to make their own trucking or warehousing arrangement whenever it is preferable.

The container operation is identically the same as the pool car operation, which has long been identified as one of the functions of merchandise warehouse. To the forwarder the container car service offers the chance to consolidate small lots of diverse classification. Into a container car, with its battery of six containers, the forwarder may load two or three containers of a

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(22) See testimony of J. F. Deasy, vice president in charge of operation, P.R.R. in Docket 21723 re Container Car Service, pp. 532 et sq.; also testimony of J. A. Brown, Assistant vice president, Missouri Pacific, pp. 669 et sq.

(23) P.R.R.: Container Car Service, Philadelphia, April, 1929.

single shipper to a single consignee in a city, and then complete the battery with consolidated containers for other consignees in the same city. Experience shows that such a result is actually taking place. This explains the tremendous expansion of the use of containers.

The forwarding company provides pick-up and delivery service and storage at terminals beyond free time. Its advertised schedules quote 48 hours free time, the same as the railroads quote; beyond the free time period the storage rate is based on the length of time the freight is stored. (24) For the first one or two days the storage rates are the same as the railroad storage rates; on a monthly basis they are approximately the same as the public warehouse storage rates for a similar commodity in the same city. (25)

This service places within the power of the manufacturer at the source the advantage of lower rates in delivering at key points in less-than-carload quantities up to 7,000 pounds. To the railroad, it affords a successful means of meeting truck competition. Extension of this service will make it possible for the railroad to use the motor truck and commercial warehouse as delivering and consolidating agencies. A great many of the trucking and warehousing companies, now competitors of the railroad traffic, would abandon that business and confine their operations to supplement railroad facilities. This view is confirmed by the fact that two forwarding companies, recently organized to handle container car traffic over the New York Central Railroad, were formerly engaged in line-haul trucking and warehousing. (26)

Store-door delivery is another service which has direct relation to the railroad operation of warehouses. This service has often been called the completed system of freight transportation, because

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(24) Testimony of Walter Bockstahler, vice president, Universal Car Loading and Distributing Co., in I. C. C. Docket 21723 re Container car service, Record pp. 250 et sq.

(25) Ibid.

(26) Examiner Ames' Report on Container Car Service, Docket 21723.

under it the railroad assumes the full responsibility and liability of the common carrier from and to store doors of shippers and consignees. This service has been in operation in England and Canada for many years. In the United States, with the exception of St. Louis—East St. Louis district where a modified form of store-door service is in effect, (27) Bennettsville, South Carolina, is the only place enjoying a complete store-door service as offered by Bennettsville and Cheraw Railroad. (28) Motor trucks are in operation in Bennettsville and a number of distributing centres within 100 miles of that point and transport a considerable volume on account of the truck competition and the new service is made primarily in an effort to meet this competition.

The railroad has been reluctant to establish this new form of service with its attending increase in responsibility and in cost of operation. (29) The Commission has conceded to the view that store-door service may be established with railroad co-operation but not with railroad opposition. (30) In some cases, however, the railroad found it advisible to offer store-door service, not on the basis of the assumption of full responsibility and liability of the common carrier from store-door to store-door, but on the basis of an optional service, which is distinct from the line haul. The operation of this service involves the use of contract truckmen or subsidiary trucking companies, such as the Boston and Maine Transportation Company, the Wilson Transportation Company, and the Texas and Pacific Transportation Company. (31) Through contract arrangement, the railroad is able to bring into

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(27) See St. Louis Terminal Case, 34 I. C. C. 453; Transfer at St. Louis 155 I. C. C. 129; U. S. vs. St. Louis Terminal 224 U. S. 383.

(28) Rules governing freight at Bennettsville, 157 I. C. C. 277.

(29) See Testimony of Mr. Robert, vice president of P. R. R. in I. C. C. Docket 19715 Off Track Station in New York, Record pp. 327 et. sq.

(30) 156 I. C. C. 205, 233.

(31) Boston & Maine Transp. Co. is subsidiary of Boston & Maine RR. Wislon Transp. Co. is subsidiary of Chicago, St. Paul, Minneapolis & Omaha RR; Texas & Pacific Trans. Co., subsidiary of T. & P. R. R.

service the facilities of local truckmen and warehousemen. (32)

Due to the rise of motor carriers, the local warehousemen often find themselves confronted just as the railroad was, with a partly used equipment. This is explained by the fact that the motor carriers often operate warehouses of their own, and the freight which formerly was carried by rail and consigned to commercial warehouses is diverted by the motor carriers to their own warehouses. (33) Under such conditions it would be to the advantage of both the railroad and the local warehouseman or drayman to co-ordinate their facilities so that the entire service, pick-up, line haul, storage and delivery may be accomplished without making any new investment or providing new facilities. These contracts (34) with local warehousemen and draymen, in addition to saving an investment in trucks, have another important merit, that is to say every warehouseman is a solicitor for the railroad. The warehouseman being a local business man, has greater advantage in soliciting traffic than the highway carrier who merely passes through the place.

c. Barge Line Competition:

The competitive relationship between barge-rail routes on the one hand and all-rail routes on the other, has been the subject of much discussion and controversy for years. Out of all the controversy, however, serveral well-established principles have been developed. One of these principles is that, in view of the slower transportation possible in barge-rail route as compared with an all-rail route, the former must be accorded a differential under the all-rail rate in order to attract tonnage. This is as it should be, because, other things equal, traffic will normally seek the most expeditious route. Having these considerations in mind, the Commission has either prescribed, or the barge and rail carriers

(32) For contracts see Appendix V pp. ~~251-255~~ infra. 224-227

(33) For discussion on the extent of Motor Freight Line cut into the business of commercial warehouses, see Distribution & Warehousing, Sept-Dec., 1919.

(34) Appendix V pp. ~~251-255~~ infra. 224-227

have negotiated, barge-rail rates through various points which are made differential under the corresponding all-rail rates.

At the port of interchange the Commission defined virtually an equal responsibility on the part of the barge line and the rail carrier to have suitable equipment available at the port of exchange, to promptly carry out the through transportation, and failing to do so the delay might properly be charged to the party at fault. (35) Accordingly, there have been in effect at most of the interchange points written per diem agreements which attempt to comply with this view. (36) According to such agreement, the barge line is reimbursed for any delay thereto caused by the line haul carrier failing to promptly furnish suitable empty cars for completing the through transportation. This has been fixed at one dollar per carload although a barge having a capacity of 10 to 15 carloads might have to be held for only one or two carloads where the rail carrier failed to provide empties upon the arrival of the barge at the port. On the other hand, the barge line would be required to make good to the rail carrier for any unduly delayed cars by reason of its failure to promptly load or unload the cars containing through freight after they have passed out of possession of the railroad. The plan rests on a basis of reciprocity.

However, the barge line has not confined its facilities to transshipment; it has extended its facilities to free storage as an inducement to traffic in a number of terminal points, such as St. Paul, Minneapolis, Helena (Arkansas), Memphis, Birmingham and Holt (Alabama). This is how the competition works. The Southern Railroad and the Louisville and Nashville Railroad have their lines from New Orleans to a large section of the southern territory. They naturally compete with the barge line for the initial transportation of sugar and other freight from New Orleans to points on or beyond their lines. When the barge line secures the business, these railroads are badly short-hauled, and important segments of their roads are not used. For example, on a shipment

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(35) See Barge Line cases, 77 I. C. C. 317; 83 I. C. C. 742; 92 I. C. C. 528; 100 I. C. C. 491.

(36) See Appendix VI pp. 255 infra. 229

from New Orleans to Decateur, (Alabama) when handled by the barge line to Birmingport and delivered to Louisville and Nashville at Birmingham, the rail haul is only 85 miles, whereas it would be 500 miles from New Orleans. Hence the 415 miles of the Louisville and Nashville from New Orleans to Birmingham is not used. To Nashville the rail haul from Memphis is 262 miles, as compared with 620 miles from New Orleans, a loss of 360 miles of profitable carriage. If sugar or other freight destined to Chattanooga is delivered to the Southern Railroad at New Orleans, that carrier enjoys a haul of 497 miles, but if delivered to it at Birmingport, its haul is only 153 miles. (37) These illustrations are typical and can be multiplied. They demonstrate the loss and injury to which the barge line storage is subjecting the rail carriers.

The storage in transit privilege overcomes the barge line handicap of slower river service and removes any necessity or reason for making the through barge-and-rail rate differentials under the all rail rates from New Orleans to southern points. The storage in transit arrangement is a mere device to enhance the advantage of the barge line over the all-rail routes from New Orleans. It furnishes a means of transportation that the rail carriers cannot possibly meet on basis of all-rail rates. The transit arrangement at Memphis, for example, has the effect of putting the New Orleans district within 230 miles of Nashville, namely at Memphis. They can draw from Memphis almost overnight, not even paying the all-rail rates, but paying the differential rates.

The transit arrangement, especially on sugar, has brought to the service of the barge line considerable tonnage that would not have come to it in the absence of this attraction. (38) Sugar refineries normally have a continuous output of considerable volume. Market conditions frequently lessen the demand; still the

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(37) Examples taken from Exhibit 19 in I. C. C. Docket No. I & S. 3053, Sugar Storage in Transit at Mississippi-Worrior Service Ports.

(38) Testimony of W. M. Hough, Traffic Manager, Inland Waterway Corp., in I. C. C. Docket 23510, Am. Warehousemen Asso. vs. Barge Line, p. 171.

refinery must continue to keep its plant going. Under such conditions they may load solid barges, retaining ownership, and let them go forward by the slower service, utilizing the 15 to 29 days or more in transit in order to make sales, and if the sugar is not all sold on arrival at the port of interchange, the remainder may be temporarily retained for subsequent sale and reshipment.

To meet this competition, the rail carriers find it necessary to authorize transit arrangements at points on their lines, on various traffic originated by them or in which they participated, moving under joint rates in connection with the barge line. In some cases the railroad refuses to join the barge line in the establishment of such joint through rates and rates, and in this stand has been upheld by the Commission: (39)

"Where the barge line performs free storage in transit on sugar, an additional element of expense is added to the cost of its service which we have on this record no means of appraising and which may, for all we know, entirely offset the lesser cost of the barge service as compared with rail service. Furthermore, this storage-in-transit arrangement apparently increases the value of the barge-rail service so that it is parctically as desirable as though all-rail service. In other words, the privilege of storing free at the end of the barge haul and shipping out by rail at any time within the limit of one year apparently overcomes the disadvantage incident to the slow movement by barge. This being the situation, so far as we can determine it on this record, no sufficient justification has been shown for any d fferential in barge-rail rates which are coupled with the privilege of free storage in transit."

3. To meet marketing changes:

The combination of modern warehousing and modern distribution has done much to revolutionize distribution. Through the joint functioning of these two facilities, distribution has changed from a slow moving process to one of great and increasing celerity.

The part played by the railroad in effecting marketing changes is by increase in the efficiency of operation. This increase in efficiency is seen among other factors in the greater

(39) 151 I. C. C. 126, 145.

speed of freight train service and the improvement in "on time" arrivals of scheduled freight trains. As a result, there is a greater dependability in freight movement and the retailers are able to carry on business with less stock on hand. In the words of the Secretary of Commerce : (40)

"In fact, the quality of service furnished by the railway, as well as other public carriers, has continued to improve and is now better than at any other time in the history of the country. Car shortages have become rare occurrences. At present it takes only from one-half to two-thirds as long to move goods as it did a decade ago. The increasing efficiency with which traffic is handled has enabled producers to make quicker deliveries and distributors are able to carry smaller stocks and to turn over their capital more quickly."

The improvement in speed is evidenced by the record ot speed over a number of years. In the Pennsylvania System, the average freight train speed during January, 1920 was 8.8 miles per hour; while in January 1930 it was 12.2 miles per hour, an increase of 3.4 miles or 38.6%. (41) In May 1928, the Atchison, Topeka and Santa Fe Railway, the Chicago and North Weatern in conjunction with the Union Pacific, the Chicago, Milwaukee and St. Paul in conjunction with the Union Pacific and the Rock Island and Pacific in conjunction with the Southern Pacific, established 175-hour service between Chicago and Los Angeles and San Francisco, which is a reduction of 24 hours from the old schedule. (42) Besides giving eighth morning delivery from Chicago to Los Angeles, the new schedule will make possible eleventh morning delivery from New York. The increase in speed is shown by practically all Class I railroads in the country. (43)

The tendency towards faster movement of freight trains has been made doubly effective as a result of the scheduling of freight trains. At present the Pennsylvania System operates 90% of its

(40) Annual Report of Secretary of Commerce, 1930, p. XVI.

(41) Data from Traffic Department, P. R. R., March 1930.

(42) Railway Age: June 2nd., 1928, p. 1306.

(43) See Interstate Commerce Commission: Monthly Review of Freight and Passenger Service Operation Statistics of Class I Steam Rys.

freight trains on set schedules and the only trains that are not operated on regular schedules and the only trains that are not operated on regular schedules are certain empty trains and some of the coal and ore trains. (44) There is a regular schedule applying to the movement of tank, refrigerator and stock cars returning to Western points for loading. The System has among its so-called "Limiteds of the Freight Train Service", the "Purple Emperor" running between Baltimore and Norfolk, the "Challenger" between Chicago and Cincinnati, the "Big Smoke" between Chicago and Columbus, and the "Ace" between Pittsburgh and Eastern points. The operation of the named freight trains has been most satisfactory. Checks were made periodically of one month's performance, which in some instances ran as high as 98% on time. The new certainty of freight train movement has also made it possible to link schedules at terminals with a minimum of delay. Such linking has resulted in a freight speed between New York and distant points in the West via Chicago which is not greatly inferior to express service.

The gain in transportation efficiency is of great significance to warehousing business. It changes the methods of warehousing. As a result of the prompt and reliable rail service, the retailer finds that he can realize real and substantial savings by carrying smaller stocks of raw materials, finished products or merchandise. An instance was cited by Mr. Hoover, then Secretary of Commerce, that because of better rail service the retail lumber dealers found that they could carry on their business with approximately four billion less board-feet in stock than six years before, thereby releasing $600,000,000 of capital in one industry, (45) Due to steady improvement in shipping conditions and dependability of service, the Curtis Publishing Company found it possible to convert a third of its paper warehouse into manufacturing space, storing a reserve at its paper mills in Western Pennsylvania and in Massachusetts. (46) The F. W. Woolworth Company now

(44) Data from Traffic Department, March 1930.

(45) New York Times, April 6, 1927, p. 9 column 2.

(46) Statement of P. S. Collins, Treasurer & Manager of Curtis Publishing Co., appearing in Railway Age, Jan. 11, 1930, p. 157.

turns its stock nine times a year as compared with six times 1923. (47) The pressure of all sales methods is for frequency of turnover. In the attainment of this frequency the most obvious step is to reduce to a minimum the quantity of stock to be turned over. It follows that the old idea of bulk storage by the retailer is forced backward. The reservoir of raw materials, foodstuffs and manufactured articles, instead of moving in the direction of the final user, is backed up one stage nearer the source.

This practice on the part of the retailers to buy relatively small quantities of merchandise for immediate delivery, instead of placing large orders several months in advance of required delivery date, is known as hand-to-mouth buying in merchandising parlance. (48) It was primarily caused by the drop in price that resulted from the crisis of 1920. Other factors which were responsible for the movement are the intensification of style influence, the application of new methods of inventory control and improved transportation. The practice of hand-to-mouth buying effects changes not only in production plans and methods but also in methods of warehousing. Manufacturers have been forced to carry large stocks and to develop facilities for making rapid deliveries. Goods are warehoused in bulk at strategic rate-breaking points in readiness for quick distribution. To illustrate: when a concern in New York competes with another concern in Chicago for the business in Chicago, the buyer is not likely to wait for a week or more for delivery if he can get what he wants the same day.

In spot distribution the terminal warehouse offers a service that is most flexible. When distributing goods through the warehouse, the manufacturer may lease space varying according to the fluctuating volume of his business; he may consign to the warehouse a carload of merchandise or a train load. In either

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(47) Statement of H. T. Parson, President of Woolworth Co., Ibid, p. 156.

(48) See Lyon: Hand to Mouth Buying, Brookings Institute, Washington: also Recent Economic Changes, Report of President's Conference, Vol. I pp. 343 et sq.

case the warehousing expense is in proportion to the space he uses. Charges are billed for each lot of goods at the time it is handled. For each shipment, be it a carton weighing a few pounds or a carload quantity, the same "advice" which reports the "delivery out of store" gives the manufacturer also every item of cost which goes with it. The cost may furthermore be pre-determined, for the warehouse quotes it in advance.

Goods are sold on a unit basis; they are manufactured on the same basis. Cost and selling price are calculated on the same basis. The charges of the warehouse are also rendered on a unit basis. To the manufacturer who operates private storage, the cost of handling, trucking, and packing fluctuate with the volume of business. The cost of private storage cannot be figured until after the close of the month when all items of expense have been reported, and accordingly the unit cost of private storage fluctuates with the volume of business.

The manufacturer who uses the public warehouse is relieved of the store-room investment. His operating costs are less. His stake at risk is less to the extent that he saves the investment in building private store-rooms in distant cities. Through the use of the warehouse receipt as collateral security, what was a "frozen asset" on the balance sheet may be converted into cash. Warehouse stocks may be "spotted" where distribution is most cheaply effected. They may be shifted to accommodate rising and falling demand, to suit the operation of the factory or to meet the seasonal requirements of the market.

The flexible service rendered by a public warehouse has made it the best means for a manufacturer to enter into distribution. As a manufacturer enters a market, his distribution is effected through the public warehouse which serves as an incubator to give his business a start in life. When the business grows he will seek some way to circumvent the warehousing cost. Even the small manufacturer would like to retain for himself the profit which he sees going to the warehouseman. This results in attempts on the part of the manufacturers to erect co-operative warehouses and to do for themselves what the public warehouse is doing.

The group warehousing plan is expected to render greater economy in distribution. When each manufacturer selects his warehouse facilities without regard to the location of the warehouses of allied industries, the wholesale buyer has to send his trucks to a number of widely scattered warehouses in order to obtain a complete line of products. Under the group plan, a majority of all allied products will be concentrated in the centrally located co-operative warehouse. This will not only reduce very materially the cost of trucking the products, but will also have a perceptible effect in lessening administrative cost of warehousing. The Associated Grocery Manufacturers of America, in giving out its reason for entering into co-operative warehousing, said, (49)

"One of our large members, who recently merged the distributive operations of products, found these products in as many different warehouses in every city. This Condition added to the investment in inventories, increased warehouse expenses, involved administrative expenses of handling warehouse records, and, in addition added largely to the expenses of distributors' stocking the merchandise from these widely separated warehouses. The result that this one member was able to achieve by co-ordinated control of several products brought a suggestion which developed our warehouse committee."

Several attempts were made in recent years in co-operative warehousing by confectionery manufacturers, druggists, makers of automobile accessories, and grocery manufactueres. The plans of the confectionery manufactueres fell through because it was found that most of the confectionery products require cold storage and the cost of building a chain of cold storage warehouses proved to be beyond their reach. The druggists started group warehousing by joining with manufacturers of drugs, manufacturers of stationery sold through drug stores, makers of rubber goods and sundries and makers of tooth brushes. They leased from public warehouses space on the usual basis of space rental, and so accomplished a more speedy handling of orders. The plan of the manufacturers of automobile accessories was to establish group warehouses. By this means the members were able to advertise that a complete line of their products might be found in these

(49) New York Times, November 7, 1929, p. 74 Column 4.

warehouses. The economy achieved through this plan was not complete because the stocks which these warehouses carried were not in carload lots such as would be consigned to a warehouse; they were merely the diversified stocks of a good jobber, limited to the lines of the co-operative manufacturers.

The plans of the Associated Grocery Manufacturers were the most extensive. The Association is comprised of over 200 principal manufacturing companies with many subsidiaries, having plants in all parts of the country. The merchandise involved includes canned goods, package food, household chemical products and virtually all articles sold in package form by individual and chain grocery stores. Through its warehouse committee the Association expects to select a number of centrally located warehouses in each important city, and in these warehouses grocery products will be concentrated so that the wholesale distributors may collect all grocery products in concentrated loads, thus effecting economy in inventory investment and in administrative expenses.

From the experience of the co-operative warehousing movement, the factors that marred its success may be attributed to lack of capital, delays in construction and want of co-operation. Granted that there is co-operation among the members, the other two factors may be remedied through the use of a railroad warehouse or a warehouse directly served by a rail siding. The building and maintaining of a chain of warehouses throughout the country call forth large investment. Land in principal cities with railroad sidings and at strategic locations will cost a considerable sum. The member companies generally have all they can manage to operate their own business, and when called upon to provide capital for co-operative undertaking they are not able to do so. Even if the plan contemplates raising capital by sales of securities it would be difficult to obtain the entire cost from investors or from banks. Further, it requires many months to do the preliminary of locating the plant and arranging for its construction. During this time the business of the individual members must go on, and as they continue to sell the goods they adapt their methods to existing facilities and often by the time the co-operative

warehouses are completed the members have progressed beyond the need for them. This situation is averted if instead of building warehouses of their own, the group lease warehouses from the railroad or from commercial warehousing companies. In this way capital investment is not necessary, and the delay in carrying out the plan is avoided. This plan is followed by the grocery manufacturers in selecting their warehouses in Philadelphia. In such selection the railroad warehouses stand in a better position than most of the commercial warehouses, due to their proximity to freight stations. This makes it possible for the members to use the warehouse for storage space and to send less-than-carload shipments by rail without cartage charge to the freight house.

4. To take advantage of air rights:

The development of air rights is another factor which encourages the building of railroad warehouses. Historically there is nothing new in this conception, for as far back as 1863 the Pennsylvania Railroad made full use of air rights in the construction of the Panhandle tunnel in Pittsburgh. (50) This tunnel under the Granite Hill in the heart of the city was built as an open cut for most of its length, then back-filled and later all the properties above it were sold as unencumbered real estate, the railroad retaining an easement covering the periphery of the tunnel structure. As a result of this operation, the city extended over the tunnel without interruption and buildings and streets go over it as if no railroad were there. This an early example of the use of air rights in the development of terminal areas. Other examples may be found in the building of Back Bay Station of the New Haven Railroad in Boston, the Grand Central and the Pennsylvania terminal areas in New York City. (51)

Many terminal warehouses are built by utilizing air rights developments. The Inland Freight Station of New York, the Terminal Commerce Building of Philadelphia, the Merchandise

(50) P. R. R. Annual Report of the First Superintendent, 1863.

(51) See W. D. Pence: Railway Terminal Air Rights Development, in Journal of Land & Public Utility Economics, May 1929.

Mart of Chicago and the Lackawanna Warehouse at Hoboken are leading examples. In all cases the first floor and the basement are operated as freight stations while the upper floors are either leased to warehousing companies or operated by the railroad as public warehouses. The Inland Station will be built by the New York Port Authority and will occupy an entire city block. The basement and ground floor, consisting of large platforms, will be used to handle railroad freight. Inbound and outbound freight is handled separately on different floors. A multiple story loft building is superimposed on the freight station in order to capitalize air rights and reduce the cost of the real estate necessary for the terminal facilities. The commercial rental from the upper floors will make it possible to furnish terminal space to the railroads at costs far below their pier station freight. (52) The Terminal Commerce Building in Philadelphia built by the Reading Railroad accommodate within its structure all factors of distribution, including office, sales, display rooms, warehouse, shipping facilities and garage.

When the Chicago and Northwestern Railroad rebuilt its station facilities at Wells Street, Chicago, it sold the air rights of the terminal area (from a level of about 23 feet above the water or city detum) to Marshall Field & Company, a local dry goods concern, which organized a company to erect and operate an 18-story building for warehouse, office, salesroom and light manufacturing purposes. (53) This structure, called the Merchandise Mart, is said to be the largest commercial building in the world, having more than 4,000,000 square feet of floor space. To serve this warehouse, the railroad has granted to the Mart Company a part of the river front dock for lighterage and also the use of individual tracks in the freight station, with a platform on which elevators will be located to serve the floor above.

The Lackwanna Warehouse at Hoboken is built on the same principle, that is, developing air rights into warehousing spaces.

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(52) Letter from Billings Wilson, Deputy Manager, N. Y. Port Authority, dated March 21, 1930.

(53) Engineering News-Record, February 23, 1928, p. 317.

Besides economy in land value, it has an advantage in location, in that it is immediately adjacent to the eastbound receiving yard of the Lackawanna Railroad and is in close proximity to the main arteries of highway traffic leading to all parts of the Metropolitan district of New York City. The location of the less than carload freight house is within the warehouse building. This makes it possible for shippers to use the warehouse for storage space and to send out less than carload shipments by rail without a cartage charge. In the warehouse itself, space is leased not only for general storage purposes but also for light manufacturing and assembling work, and a complete section on each floor is set aside for storing bonded merchandise. Storage in transit privilege is also allowed at the terminal and a distribution and delivery service is planned which will make available to shippers trucking service to all sections of the metropolitan district within a radius of 40 miles.

Air rights possess general characteristics which enhance their value for warehouse purposes, namely, their proximity to a freight terminal, their large areas, and the fact that they constitute assembled property ready for development. One of the most difficult problems facing the building of warehouses and freight depots in big cities is the assembling under one ownership of a number of contiguous parcels of land so as to form a plot of sufficient size for the building purpose. It is for this reason that a large tract of land already acquired possesses a greater value than a number of small lots. Railroad ownership is usually quite extensive, and it is generally the case that the railroads have at their disposal areas of air rights of much greater extent and much more desirable from the standpoint of terminal operation than any unencumbered land in the neighborhood. This fact, together with the advantage of location, has fostered warehouse development by the railroad in a number of cities.

CHAPTER VII

EFFECTS OF RAILROAD WAREHOUSING OPERATION ON MUNICIPAL AND COMMERCIAL ENTERPRISES.

As developed in the preceding chapter, when a common carrier completes its transportation service, its liability as a common carrier ceases after a suitable length of time is provided for the shipper to call for his freight, and beyond that period of time the liability of the carrier becomes that of a warehouseman. Consequently, the storage service performed by the railroad has been divided by some writers into two parts, voluntary and involuntary. (1) Voluntary storage is to indicate that period of storage which is incidental to the receipt and delivery of freight in line-haul movement. Involuntary storage is to indicate the period of storage beyond "free itme". It is the practice of the railroad at the ports to provide varying amounts of storage facilities which, at nominal charges and under certain restrictions, are made available only to contracting shippers for longer periods of time. It is termed "involuntary" because the railroad is more or less forced into such operation, partly to accommodate the shippers who exercise no diligence to call for their freight, and partly to offer more flexible service to large shippers as a solicitation device.

This storage service beyond free time has been a bone of contention between the railroad, municipal and commercial warehouses. The service is provided for in the railroad tariffs, that is, the charges are separately published and assessed by the railroad at the Atlantic, Gulf and Pacific ports. The railroad chooses to treat it as if it were transportation service, by publishing a tariff which at least contains some charge, but as a tariff itself it is defeated by the limitation that the carrier disavows any obligation to render the service for all comers and says that arrangements must be made in advance. Because this storage service is not open to all and because it is offered at a nominal

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(1) Argument of C. E. Cotterill in behalf of Am. Warehousemen Asso. for re-opening of I. C. C. Docket 12681, re Charges for Wharfage, Storage etc. Hearing at Washington, Jan. 7, 1931. Record pp. 6166-6179.

charge, it has given rise to some operating problems to municipal and commercial enterprises.

OBJECTION TO THE RAILROAD PRACTICE:

The first objection to the railroad practice of providing such storage is that the service is not open to all. At the South Atlantic ports a tariff exists in which the publishing agent makes a declaration to the following effect, (2)

"These lines under this tariff have no obligation to provide..... storage.....for property which has not been transported nor is intended to be transported to and from the ports over their lines; and as to property which has been transported or is intended to be transported over their lines, have no obligation to provide.....storage.....beyond reasonable capacity of their property and facilities."

In the North Alantic the service is somewhat more pointed. The Erie Railroad, for instance, provides in its tariff that the Erie has warehouse facilities in Jersey City in which a limited amount of storage can be given on shipment of westbound freight in carloads. (3) The Delaware, Lackawanna and Western Railroad tariff provides that its company "having limited facilities at indicated places, is prepared to offer certain available storage for freight westbound, not bulk freight, in carload lots, subject to the following conditions", (4) and among them is the declaration that arrangement must be made in advance. The weakness of such service lies in its limitation. To enjoy such service, the traffic must be westbound, and in addition arrangement must be made with the railroad in advance of shipment from points of origin.

What are the arrangements? It is a question of bargain. "What have you to offer? Where is your freight going to? When is it going? What amount have you to offer? Are you going to ship this particular freight or are you going to sell this in

(2) Agent Glenn's Port Tariff, I. C. C. A-622.

(3) Erie, I. C. C. 17502.

(4) D. L. & W. I. C. C. 21315.

New York City and Charleston and if you are not ever going to ship this particular freight are you going to have some next week?" (5) These are some of the considerations. As indicated in its tariffs the carrier makes no pretension to accommodate every shipper but only those with whom arrangements have been made in advance. Why should there be any limitation as to who may enjoy the service? It is because the service is rendered at nominal charge.

To get some idea of just how low the storage charges of the carrier at its port terminals are, a comparison is made of the storage charges of the carrier with the charges of the commercial warehouses. As brought out by a railroad witness, (6)

Q. What is your storage rate on news print paper, Mr. Brown?

A. When handled under Glenn's Port Charges Tariff, the storage rate for each thirty days, or fractional part is one cent per hundred pounds.

.....

Q. I was asking particularly Mr. Brown to inquire if there is a complaint as to the measure of that storage rate on the part of interior warehouseman who advise me that your port storage rate is approximately one-fourth to one-fifth the prevailing commercial rate for the storage of news print paper?

.....

Q. Now it then appears that your storage rate on news print paper is the same as fertilizer. From the standpoint of space occupied, the value of the commodity, the elements of risk involved in its handling and the nature of labor involved in its handling in storage, would you say that from the standpoint of comparison of commodities, is it logical to charge no more for news print paper in rolls than for fertillizer?

A. Well, I don't know.

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(5) I. C. C. Docket 12681, op. cit.; pp. 6175 et al.

(6) Ibid, pp. 5111-13, testimony of W. F. Brown, Chief Clerk of Central of Georgia.

Q. Well, at least without asking you specifically to commit yourself, you will give further thought to that item I am sure?

A. We will.

Every comparison of the charge of the cheaply operated rear warehouses with the charge of the costly shipside terminals of the railroad shows that the charges of the shipside terminals are much less than those of the rear warehouses. At New Orleans the storage charge upon compressed cotton, in rear warehouses, is 55 cents per bale the first month or $2.20 per ton per month; at Mobile, the same charge is made, of $2.20 per ton per month; and at Savanah, the charge is 50 cents per bale per month or $2 per ton per month; whereas at South Atlantic and Gulf shipside terminals of the railroad the charge on cotton is 20 cents per bale or 80 cents per ton per month with free storage for the first ten days. (7)

Not only the storage charges have been low, but they are in many cases below the out-of-pocket cost. This statement is substantiated by exhibits of the railroad in a recent investigation of the Commission : (8)

Railroads	Port Terminal	Out-of-pocket cost per ton	Storage Charge per Tariff
Atlantic Coast Line	Pinners Point	68 cents.	20 cents
	Wilmington, N. C.	64 ,,	20 ,,
	Savannah	51 ,,	20 ,,
Louisville & Nashville	Pensacola	50 ,,	20 ,,
Southern Railroad	New Orleans	$1.89	47 ,,
	Pinners Point	2.23	65 ,,
Illinois Central	New Orleans	1.13	74 ,,

(7) Figures from the Brief of Turner Terminal Company, Mobile, Ala. in I. C. C. Docket 12681.

(8) This table is compiled from exhibits of the railroads in I. C. C. Docket 12681; Atlantic Coast Line Exhibit SA 40; Louisville and Nashville Exhibit SA 77-78; Southern Exhibit SA 42; Illinois Central Exhibit SA 72.

The effects of charging service below cost is obvious; it drains the resources of the railroad. At port terminals large sums of money have to be expended for dredging around the wharves and piers; distinctive types of facilities consisting of piers and sheds have to be provided, maintained and operated; and various expensive accommodations need to be provided. Yet from such operation the railroad reaps no profit but sustains a substantial loss.

The loss is carried in the operating expenses involved in the performance of terminal service. It swells the total of the operating expenses and is a distinct drain and burden upon all classes of railroad service actually performed. Such storage fecilities constitute, therefore, merely a device by which the carrier attracts tonnage for transportation over its lines; they are not created to afford warehouse space as such, but to attract traffic and thereby obtain the rail haul revenue by offering the service to such shippers as are in a position to enjoy it.

In view of these conditions, the service must be limited to large shippers or to such freight as the carriers compete for with other railroads. This will continue of necessity to be so, because the warehouses must be maintained out of the revenue secured from the line haul carriage. The carrier's facilities will not be in the nature of port development. It must be apparent that the tendency would lead to this result. The carrier in furnishing the service at a loss must restrict the incurrence of such loss to such shippers as will supply the carrier with a heavy volume of rail tonnage, theoretically compensatory in the line-haul revenue obtained.

The railroad practice in charging the storage service for less than cost has the effect of restricting municipal and commercial development of terminals. A municipal or commercial terminal cannot make its storage charge any higher than the corresponding charge fixed by the carrier because transshipment traffic will naturally seek the avenue of lowest cost. If the railroad charge is so low that it yields no revenue for interest on funded debts or return on investment on the property, the same charge applied to the municipal and commercial property likewise will pay only the cost of maintainence and yield no revenue for return on investment

from which sinking fund and interest requirements can be met.

So far as import commodities are concerned, it is seldom that the entire cargo can be shipped as fast as it is discharged from the vessel. Part of the cargo may be unsold, part of it may be sold for later delivery, part of it may have to be sorted or held for documents or instructions. The municipal and commercial warehouses naturally expect to have a regular line of business and are naturally interested in the charges of the railroad, for they must generally set their charges in line with the railroad charges. If the railroad charges are lower than those of the non-railroad warehouses the traffic would naturally seek the railroad warehouses. If the municipal and commercial warehouse rates are higher than those of the railroad warehouses the municipal and commercial warehouses cannot depend on any regular volume of business, as the traffic would turn to railroad warehouses first, then be held in railroad cars before going to municipal and commercial warehouses. If the traffic is to move via municipal or commercial facilities, the expenses to the shippers must be substantially the same for doing business through the railroad terminals. The municipal and commercial enterprises are, therefore, vitally interested in the charges in effect at railroad terminals because the railroad charges are of necessity their charges.

The extent of municipal and commercial investments thus adversely affected by the railroad practice is very great. An estimate has been made of the municipal and commercial terminal investments in Virginia, South Atlantic and Gulf Ports and found to be $129,650,000 as compared with the railroad investments of $32,666,710. (9) Thus the investments in municipal and commercial terminals serving the commerce of this section, are over four times the investments in railroad terminals. The same relative difference exists at North Atlantic and Western Gulf ports with a far greater investment in municipal and commercial

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(9) I C. C. Docket 12681, op. cit. Exhibit Witness Wait, No. SA 57. This exhibit reproduced in full in the Appendix VII pp. 257 infra. 23/

terminals than in railroad terminals. (10) The extensive facilities of the New York Dock Company and the Bush Terminals at the Port of New York, the Galveston Wharf Company at Galveston, and the state owned terminal at New Orleans are good examples of the public and private enterprises. When it is understood that the railroad terminal investments represent only one-fourth of the total investments of the municipal and commercial terminal development is better appreciated.

JUSTIFICATION FOR THE RAILROAD PRACTICE:

The fundamental difference between the storage service of the railroad and the service of the independent warehousemen should be recognized. The storage service of the carrier is rendered in connection with line haul transportation. The storage charge of the railroad should properly be fixed with some reference to the fact that the carrier has received or expects to receive a line haul on the traffic at its separately published line haul rates, and the obligation assumed by the railroad under the tariff is expressly predicated upon an understanding that the railroad performing the storage service shall obtain also a haul of the traffic over its lines in transportation service.

Competition between the railroads and competition between the ports likewise must play an important part in the question as to what the storage charges of the railroad may or can be made. A difference in the amount of the charges of one carrier, as compared with the charges of the other carrier in the same port, or in the amount of the charges of all carriers at one port as compared with the charges of carriers at other ports, will inevitably have a tendency to divert the movement of the traffic away from the lines of one carrier or one port to another carrier or another port, the first carrier thereby losing altogether the opportunity which it would otherwise have had to obtain an inland rail haul over its lines. History of the port terminal situation indicates that from

(10) Ibid, Joint Brief of the Alabama State Dock Commission Port Utility Commission of Charleston, Board of Commissioners, City of Mobile, Turner Terminal Company, Mobile.

an early period of railroad rivalry this port competition has always exercized a controlling influence.

As an illustration of this competition, an examination is made into the situation at New Orleans. At this port it has been the practice of the carrier to absorb the terminal charges for many years. The reason for this practice, as stated by a traffic official, is due to two kinds of competition; first, competition with the North Atlantic ports; and second, competition between the carriers. (11) The carriers not owning such facilities are compelled to absorb wharfage, loading, unloading and storage charges on import and export traffic if they desire to participate in such traffic. The lines owning their own facilities are very potent factors in the handling of import, export and coastwise traffic to or from the states of Arkansas, Oklahoma, Kansas, Missouri, Nebraska, and other midwest and western States. The lines reaching the territory through the Mississippi and Missouri river crossings and in the traffic via these lines, the line haul charges include the terminal handling charges at New Orleans.

The lines serving the Texas ports, chiefly Galveston, are forced to meet the New Orleans competition, and in many instances are compelled to make rates for line haul service to the western points equal to the rates from New Orleans. The record of the Southwestern Traffic Association shows that when the agitation for the absorption of terminal charges commenced, such agitation grew out of the practice of absorbing such charges at New Orleans, and that failure to absorb such charges at Galveston would seriously impede the movement of traffic through that port in competition with New Orleans. (12) The adoption of the practice of absorbing terminal charges at Texas points is not based on consideration of the reasonableness of such practice but on the basis of port competition. It is evident, therefore that in the fixing of storage rates, which is one part of the terminal service, consideration must be given to the competitive factors.

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(11) Ibid; testimony of L. F. Gordon, Texas & New Orleans Railway Houston, Texas, Record pp. 5351-55.

(12) Ibid; Record p. 5355.

Q. Now, as I understand you, you are compelled to absorb those charges in the line haul rates by reason of competition?

A. Yes, Sir.

Q. And what were it not for that competition, you would prefer to have the line haul rates separated from these charges for the port terminal service?

A. Yes Sir, in so far as the party that bears those charges is concerned. (13)

Aside from the problem of port competition, there is the question of economy to be considered. In the South, for example, it is a well known fact that there are two seasons through the carrier's business year: namely, the cotton and the fertilizer seasons. In order to provide bagging and ties for the imported fertilizer materials, they are moved to the ports in advance of such busy seasons. It is economical and reasonable business practice to do so, but in order that this may be brought about, it is necessary that temporary storage be provided for such commodities. This plan enables these materials to be in close proximity to the points of consumption, and the movement of these commodities between the ports and such points of consumption enables the Southern carrier to keep the cars in its own territory during the cotton and fertilizer seasons at the time they are required, thus bringing about a maximum efficiency in the handling.

It is true that after these facilities are provided, the carrier then drifts into the storage of other commodities such as cement, salt and often lumber and iron ties, purely as means to gain additional revenue, but at time when these facilities are not being used for the purpose for which they were oirginally provided. During the past two years when the import and export traffic was abnormally low and when many of the railroad warehouses were empty, there were instances when the carrier solicited business for general storage, and, owing to lower charges, was able to take business away from the independent warehouses. While this is not entirely fair to the independent warehouse, it transgresses no

(13) Ibid; Record pp. 5390-91.

provision of the Act to Regulate Commerce. The carrier is simply endeavoring to obtain the maximum revenue out of the warehouses which competition would permit.

Even when the carrier waives profit on its storage service, there is on unlawful discrimination or preference inherent in the plan. The municipal and commercial facilities are in many instances active competitors of the railroad for terminal business, and under the law the carrier is under no obligation to make its charge with a view to ensuring a profit upon operations of other terminals. (14) In some cases, the railroad recognizes the benefits to commerce arising from the operation of municipal and commercial facilities, and has provided that it will absorb switching and certain other charges necessary to enable traffic to pass over municipal or commercial facilities on the same basis as traffic passing over its own facilities. Every ton of traffic thus diverted to the municipal and commercial facilities represents a reduction in the revenue of the line haul carrier to the extent of such absorption. It would certainly be unwise for the railroad in all cases to make the charge on a basis which will enable competitors to take away its business.

Another point raised against the railroad practice of providing storage service is that such practice has restricted terminal development by municipal and commercial enterprises. In determining the adequacy of port terminal facilities, they should be considered from the standpoint of their ability as a whole to reasonably care for the commerce that may or should flow through them. If there have been provided, at ports fairly accessible to the territory and traffic to be served, reasonably modern facilities which are capable of caring for the traffic, the facilities cannot be said to be inadequate from the traffic standpoint even through at certain ports they are not of the class which the ambitious municipality considers necessary to attract commerce through its portals. Consideration must be given to the nature of the traffic handled. If the traffic normally passing through a port is

(14) Handling Charges on Cement, Fertilizer etc., 93 I. C. C. 640, 644 Wharfage Charges etc. 157 I. C. C. 663, 689.

fertilizer material, it cannot be expected that the same class of facilities would be provided as if the traffic consisted of high grade commodities. In an investigation which lasted ten years, the Commission found no evidence offered by shippers or boat lines using the Atlantic and Gulf ports that the facilities at these points were inadequate. This indicates that the railroad practice does not hinder port development.

"Commissioner Meyer : (15) As you know, I repeatedly asked to be given a chance to see witnesses who could give me the reason of record, so that I might make a recommendation to the Commission. What are those good reason, stated in this record?

Cotterill : So far as the witnesses are concerned, the record shows, we think, an accumulation of facts from which the conclusion may be drawn that there is an inherent vice in the extension of virtually gratutious extra-carrier service.

Commissioner Meyer : Yes, Mr. Cotterill, but we have general assertions here over and over again, but where there is so much wrong there must be somebody who knows he has been wronged, and who can tell to the people who are willing to understand him wherein he was wronged. Why was not such a man produced?

Cotterill : By your statement that he was wronged, you mean some shipper who was denied the service?

Commissioner Meyer : As I said over and over again, bring me the man who says he was hurt, I want him to tell me why he has been hurt.

Cotterill : I do not believe you will get them, under the conditions prevailing up there now.

Commissioner Meyer : Where there are so many people hurt, why is not someone will to tell me?

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(15) I. C. C. Docket 12681, op. cit. Record, p. 6269 (This argument was presented in Washington, D. C. January 7, 1931. Mr. Cotterill represented the American Warehousemen Association.

Cotterill: Because the shipper denied free dockage at a given point, or in a given case, may find it by going next door, and can get at another place, and he won't come to the Commission."

When a shipper, denied of a service at a given point or in a given case, secures such service by going "next door", it cannot be said that the facilities are inadequate. There is reason for the examiner to conclude that from the testimony offered it cannot be said that the terminal charges and practice of the carriers, as a whole, have resulted in restricting the development of port terminals to the undue prejudice of persons, localities or description of traffic. (16) On the contrary, the conclusion is inescapable that existing facilities at the South and Gulf ports are reasonably adequate to accommodate the commerce which should normally flow through them.

Not only are the existing facilities adequate, but there are railroad facilities which fall into disuse due to the lack of tonnage. The railroad facilities at Charleston, valued at $800,000 and those at Jacksonville, valued at $2,000,000 are not used for general export and import traffic. (17) They are either in total disuse or leased to private individuals. (18) There is not sufficient export and import traffic to make each and every city and hamlet situated on navigable water an important port with ultra modern facilities. In fact the high handling cost at the port terminals is due to the high ratio of ports to tonnage handled. This is again borne out in the testimony, (19)

".....I do not think the present situation has in any way deterred development of port facilities paritcularly on the Gulf of Mexico, for the handling of foreign and coastwise commerce. For example, from New Orleans to Galveston, a rail distance of 347 miles,

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(16) Tentative Report of the Examiner in the Original Investigation, Sheet No. 9.

(17) 157 I. C. C. 663, 688.

(18) Ibid.

(19) I. C. C. Docket 12681, op. cit., Testimony of Carl Giescow, New Orleans Traffic Bureau, Record, p. 5859.

there are eight ports, including the port of New Orleans. From New Orleans to Pennsacola, a rail distance under 200 miles, there are 4 ports including the port of New Orleans.

" I think one of the chief difficulties is that we have more facilities than we have commerce, and there certainly has been no stunt of the development of facilities by reason of rail ownership of facilities at the Gulf."

In theory it may seem desirable to encourage extensive port terminal facilities; the advisability of such measure in practice is open to doubt. (20) The concentration or centralization of traffic at the fewest number of terminals necessary to accommodate the traffic, is highly desirable from the standpoint of commercial transportation, especially water transportation, and the creation of many small facilities by private capital would add to the cost of transportation both rail and water. The carrier holds itself out to perform only such storage as is incidental to transportation, and, as there is a certain amount of storage at the port not of that class, there is limited need for independent warehouses. As the carriers do not ordinarily engage in such storage, the charge which they assess should not have serious effect on the legitimate business of the independent warehouses.

The crux of the situation lies in the fact that neither the storage charge nor any other terminal charge can be based on the actual cost of service at different ports plus a reasonable return on investment. To do so would result in varying terminal charges and rates at and to the different ports. The carriers in fixing their terminal charges and export rates have largely disregarded varying costs in order to keep competing ports on a parity. If the storage charges were to be based on the exact cost of the service at different ports, it might be contended with equal force that the same principle should be extended to the other service and line haul rates, with ultimate disruption of the entire competitive adjustment. The following principle brought out by a capable

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(20) The policy of the U. S. Government to encourage entensive port terminal development is seen in Section 500 of the Transportation Act 1920, Section 8 of the Merchant Marine Act, and the River and Harbor Act of March 2, 1919.

commissioner is of great significance : (21)

Q. Mr. Prince, with reference to one of the question which was asked Mr. Glover, the previous witness, please state whether the carriers in the southeast have ever in the past undertaken to fix terminal charges on a basis designed to yield a per reasonable return for the service rendered?

A. In my opinion, absolutely no.

Q. Were the charges as now in effect fixed upon that basis?

A. They are not, and we expect to show that they are not.

Q. Do you feel that it has been or is now possible in view of competitive conditions that exist for the carriers to establish or maintain charge that would reasonably compensate for the service actually rendered?

A. Under the present condition, absolutely no.

Q. (By Commissioner Potter) I understand you to say that the charges for wharfage, handling and storage are the same and must be at all ports, is that right?

A. At Virginia and South Atlantic and Gulf Ports east of New Orleans, yes.

Q. You think that is a sound principle of transportation and port practice, do you?

A. I certainly do.

Q. What would be the effect of a radical departure from that practice at one port or another?

A. It would draw traffic through the ports that are not logically entitled to the traffic.

Q. Would it be possible to have port charges so as to pay a return on investment without thus throwing the adjustment out?

A. I do not think it would.

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(21) I. C. C. Docket 12681, op. cit., Testimony of B. C. Prince, of the Seaboard Air Line at Norfolk, Record pp. 147-151.

Commissioner Potter: It seems to me, gentlemen, that the statement brought out in the last few minutes on Mr. Prince's testimony develop the whole crux of this controversy and I hope as the case goes on these fundamentals will be appreciated and considered and there will not be unnecessary time taken in argument and discussion and repetion. As I see it, we hit upon the basis of the situation. If he is correct, only one conclusion is possible, and if another conclusion is possible, it is only because his statements are not sound. If it be true as a matter of economy and fairness to ports and transportation at the ports that wharfage, storage and handling must be the same at all ports, if that is true and if it be true that wharfage charges cannot be fixed so as to pay a fair return without throwing that equal adjustment out of balance, then that disposes of the proposition to base wharfage charges upon the value of the property.

The above quotation hits upon the basis of the whole situation. The theory upon which the present tariff is founded involves no attempt to fix a separate charge for each terminal service with sole reference to the particular operating cost there prevailing.

Policy of the Municipal Warehouses:

In view of the low rates charged by the railroad, what is the policy of the municipal warehouse to meet the situation? To the municipality, the consideration for increased traffic is above the consideration for higher rate. Each city seeks to attract increasing volume of freight to itself as the portal of export and import trade, and in so doing it has centred its attention upon improved terminal facilities, among which are warehouses. The motive prompting this effort to attract traffic may be explained by the desire for growth and the hope for increased individual prosperity through greater community prosperity. In such attempts, cities have been supported by their states, and, in some instances such as New Orleans and San Francisco, the port warehouse system is in reality a state enterprize, but is popularly and commercially thought of and spoken of as belonging to a particular city.

Port development means not so much a corps of engineers and a huge construction program as it does a building up of freight tonnage it is commerce that makes a port. Ships will go anywhere to get paying cargo. They will go as far inland as water will float their keels, provided only that full cargo discharge or loading be available. To break bulk gnaws into the profits of a ship. The competition of ports, accordingly, becomes a competition in assembling cargoes, and for every outbound cargo the competing port must arrange to absorb an inbound cargo of equal bulk. Here lies the strength of the terminal storage, because through it a "balanced" tonnage is made possible for the vessel, that is, an incoming vessel is assured of an outgoing cargo. With vessels, as with railroads, an empty back haul wipes out profit, and when return cargo is not available the one-way freight must pay enough to offset the loss of a return in ballast.

In performing storage service, the municipal warehouse often makes charges below cost. The desire for profit might afford sufficient stimulus to keep the charge of the commercial warehouse up to the level of fair return on investment, but in the case of the municipal warehouse the desire for profit is usually not present. Rather, the operation is actuated by a desire for indirect benefits which accrues from attracting commerce to the port, and municipalities are generally willing to operate their facilities without profit, or even at a loss which is recouped through general taxation. This condition is especially true at newer ports which are compelled to hold out inducements, usually in the way of cheap service, to entice traffic from channels to which it has accustomed itself. The higher the storage and other terminal charges are made at the smaller ports, the more difficult it will be to secure traffic in competition with the larger and better established ports. It is significant to note that the charges at the Municipal Terminal at Jacksonville are approximately one-third of the charges of the commercial warehouses in the same city. (22)

"Q. Mr. Banks, how does your charge for storage and handling compare with that of general merchandise warehouses?

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(22) I. C. C. Docket 12681, op cit., testimony of J. A. Banks, General Manager, Municipal Terminal, Jacksonville, Record pp. 5220-22.

A. Take the Union Terminal Warehouse Company of Jacksonville for example. It handles general merchandise of its warehouse accounts and has truck connection alongside of its warehouse but away from the river front. They have no excessive maintenance, due to the action of the water on the structure such as we have at the port terminals; and they have no dredging as we have, and yet their storage charges are approximately three times that of ours and their handling charge is also much greater than ours and amounts to about three times as much per 100 pounds.

Q. How do your charges compare with the stevedore charges?

A. In a number of instances our handling charges are actually less than the amount which the stevedores charge."

At the municipal terminals the free time allowance tend to be more generous. Jacksonville Municipal Terminal advertises that it adheres to Glenn's tariff on port charges with the exception of giving free storage and making no charge for handling from storage to ship on commodities arriving on through export lading, and that it gives 30 days free storage on export cotton while the Glenn's Tariff gives only 10 days. (23) At New Orleans the tariff of the Dock Commission provides that "on cargoes where it is evident that it is impracticable to handle same within the periods stated and where the public requirements will permit, arrangement may be made with the Superintendent in advance of the expiration of free time for further time." (24) Such tariff provisions are evidently designed to give the large shippers more flexible accommodation for traffic consideration.

Besides the advantages of lower storage rate and longer free time, the municipal warehouse offers the attraction of highly specialized facilities. New Orleans, Jacksonville, San Francisco, and Portland (Ore.) may be taken as examples. In addition to wharves and sheds the Dock Board of New Orleans possesses public cotton warehouses, grain elevator and specialized facilities

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(23) Jacksonville Traffic Bureau: Port of Jacksonville.

(24) New Orleans Dock Deprtment Tariff: Item 140.

for handling and storage of coal, bulk freight and oil. The cotton warehouses built at a cost of over $6,000,000 and offering 33 acres of covered warehouse space, are the largest of their kind in the country, The entire plant, including ranging fields and other open working spaces, occupies 48 acres of ground, and there are 14 acres for expansion on the site originally provided. It is elaborately equipped with mechanical devices for quick delivery, storage, and every character of service. It is served by a two-story wharf house with railroad tracks at shipside, and by intra-plant switches which provide 258 car-settings, in addition to track storage capacity of 1000 cars. Negotiable single-bale receipts are issued on practically all cotton stored, and in busy seasons as many as 8,000 such receipts are issued daily. (25) The negotiable receipts are accepted as a basis of settlement for delivery on future contract of the New Orleans Cotton Exchange. (26)

The bulk commodity handling plant at New Orleans is another example of the high class equipment available at municipal terminals. The plant was originally designed for the handling of coal or coke. It is electrically operated and all transferring is by belt conveyors. There are two steam unloading towers each with one clamshell bucket of 48 cubic feet capacity. Belts carry the coal over an automatic scale either to the storage pile which has a capacity of 25,000 tons or to the wharf at the rate of from 600 to 1,000 tons per hour. Delivery of coal can be made to vessels from storage or direct from cars at the rate of approximately 400 tons an hour.

The Port of Jacksonville is reputed to be the second largest naval stores depot in the world. (27) The storage facilities are largely within the municipal terminal, where 60 acres are devoted

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(25) Board of Commissioner of New Orleans: New Orleans Year Book, 1930, p. 26.

(26) Commercial & Financial Chronicle, Sept. 22, 1928, p. 1589; Cotton Warehouses of New Orleans assumes Warehousing Service under supervision of New Orleans Cotton Exchange.

(27) Jacksonville Traffic Bureau: Port of Jacksonville, p. 23 (1929).

to the handling and storage of naval stores with a capacity for 200,000 barrels of rosin and 50,000 barrels of turpentine. The terminal is equipped with electric pumps and pipe lines for loading turpentine direct ex-storage to vessels and tank cars, and a pier devoted exclusively to the handling of naval stores.

The ports of San Francisco and Portland (Ore) have developed elaborate facilities for the handling and storage of fuel and essential oils. The facilities consist of tanks for storage, equipment for heating, pumping and transferring from bulk into smaller containers, not only for crude petroleum and refined kerosine and similar products, but also for molasses and Oriental oils.

On the whole the municipal warehouse offers the advantages of lower rates, longer free time, and better mechanical facilities than other warehouses. Its operation being on a non-profit basis enables it to render service with little regard to cost, and when the charges fall short of compensatory level, there is always taxation as a means of recouping losses. Its main purpose in conducting the storage service is to attract traffic and to increase individual prosperity through greater Community prosperity.

Policy of the Commercial Warehouse:

The policy of the commercial warehouse, like all other commercial undertakings, is for profit. The storage rates at the railroad and municipal terminals are so low that it is impossible for commercial terminals to make the same charge and make a fair return on investment. It is pointed out, particularly in behalf of the Wiggins Terminal at Boston and Bush Terminal at Brooklyn, that the transit storage rates of the rail carriers are about 25% of those of the independent warehouses. (28) The position of the commercial warehouse as represented by the American Warehousemen's Association, is that the railroad should be required to increase the storage rate to conform more nearly to the cost of the service. (29)

(28) 157 I. C. C., 663, 687.

(29) Ibid, p. 689.

In this connection it must be remembered that the railroad storage service is incidental to line haul service, and the charges therefor must stand in an entirely different light from those of the commercial warehouseman. (30) The charges imposed by commercial warehouses afford no criterion of the reasonableness of a carrier's charges, nor is the value of the service conclusive. (31) The service granted by the railroad under the storage beyond free time is limited to bulk storage. This form of storage formerly formed an important part of the business of the commercial warehouse, but since the war this service has declined in importance. Changing conditions, such as expedited freight service and spot stock distribution, have made a marked difference in the quality of warehousing service. Where formerly large quantities of goods solidly filling the buildings remained in storage for long periods and deliveries were made in large lots, a very substantial portion of the present day waterfront warehousing consists of small lots and varied assortments, entailing considerable extra space, supervision and both manual and clerical labor. Distribution service which is the keynote in modern warehousing is not included in the transit arrangement. Competition between railroad storage and commercial storage lies in bulk storage at terminals. It is the low rates on bulk storage at terminals that commercial warehouses are portesting.

To meet the situation, commercial warehouses have adopted the policy of specializing in services that are not included in bulk storage, and in this way they are building up business that is not in direct competition with the railroad. Among these services are co-ordinated transportation-distribution service, flexible storage service, housing service for industry and export distribution service.

Co-ordinated transportation-distribution service is best illustrated by the facilities at Bush Terminal. This plant covers 200 acres on the water-front and includes industrial loft buildings, warehouses, piers, and terminal railway facilities. There are 18

(30) Ibid.

(31) Cleveland Seth vs. P. R. R., 34 I. C. C. 638.

model industrial loft buildings containing more than 6,000,000 square feet leased to tenants for manufacturing and distributing operations. There are 125 warehouses for general storage purposes, providing 26,000,000 cubic feet of storage space, and a cold storage plant with 1,000,000 cubic feet of space. There is a battery of 8 steamship piers with approximately 2,000,000 square feet of floor space, capable of providing berth for 35 steamers at a time. These piers are under lease to companies operating 26 steamship lines serving 85 of the world's ports and handling 20% of all the export and import traffic moving through the port of New York. (32) The terminal railway facilities include a fleet of locomotives and some 35 miles of tracks accommodating 1,000 cars with a union station to handle the receipt and delivery of freight moving via trunk lines. By means of car ferries owned and operated by the company, freight cars from the terminal reach all parts of New York, thus eliminating cartage to and from local freight stations whether the business be carload or less than carload. Through the co-ordination of these facilities, the terminal offers the most complete transportation-distribution service in the metropolis.

At the progressive terminal warehouse, flexible storage service is rendered. It is termed flexible because the service is adjusted to the varying needs of the patron. When the shipment consists of regular, uniform packages permitting the warehouseman to determine the unit cost, a "package unit service" is offered at a fixed charge per package per month. When the shipment cannot be handled by package unit, the warehouse provides a "space unit" service, under which the tenant is provided with a space unit of 400 square feet and the charge is based on the space used plus a handling charge. Additional space unit is provided as the business of the tenant expands. When the shipment can only be handled by some one specially trained, a space unit is partitioned off by steel caging with a lock the key of which is held by the tenant. Under this arrangement, known as "self-operated unit service", the tenant's employee supervises the handling and

(32) Bush Terminal Company: "Manufacturing and Distribution Economics."

storage of the shipment. Such service provides a medium to meet modern marketing methods required by manufacturers. In a sense it is a branch or stock room, but without capital expenditure of fixed overhead. With overhead costs spread over hundreds of manufacturers the cost to each is very low. Regardless of location a manufacturer can place either a large or small stock of products in such warehouse for distribution, using the type of service that suits his need best.

Housing industry forms an important service at the large terminal warehouse. The New York Dock Trade Facilities Buildings and the Bush Trade Facilities Buildings serve manufacturers who require facilities to do light manufacturing or assembling work within the metropolis. Space may be had in either small or large units with many advantages resulting from the co-operative basis on which all the operations of the plant are conducted. Tenants who use electricity and live steam are supplied by the company. Incoming freight, carload or less than carload, is unloaded from the cars in which it was shipped right at the door of the trade facilities buildings to which it is consigned, is unloaded by the terminal employees and is placed on the elevators and delivered at the floor occupied by the tenant. Outgoing freight, in large or small lots, is placed on the elevators by the tenant accompanied by bill of lading, whereupon the tenant's responsibility ends. The terminal employees remove the freight from the elevators, load it into cars at the platform of the trade facilities buildings, and the shipment is on its way. As a testimonial to the economy and efficiency with which manufacturing and distributing operations are conducted in these buildings, the average vacancy in the Bush Trade Facilities Buildings, over a period dating from the construction of the first building, has been less than one-eighth of one per cent. (33)

In its efforts to develop new business, the Bush Terminal Company offers what it terms "Bush Straight Line Distribution Service". The aim of the service is to relieve shippers of the complexity and risk involved in export trade by assuming all

(33) Ibid

responsibility for the commodities from the point of origin to the point of destination. This is a great improvement over the through export bill of lading under which the issuer assumes no common carrier's liabilities during the period of storage interim between vessel and railroad at ports. (34) Under the Bush service, the company undertakes to convey the merchandise from any point in the United States or Canada to any point in Europe (except Russia), the Near East or Persia, and assumes "unqualified responsibility for the safe conduct and handling of the goods from the time that the merchandise is turned over to it at any points until its delivery at destination". (35) Never before in the history of international commerce has a responsible organization assumed such wide obligation to secure the safety and expeditious movement of export and import shipments.

In its physical features, the service is designed to provide among other advantages the fastest or cheapest routing of merchandise according to requirements. It makes possible consolidated car shipments, provides warehousing and sorting at any point, assumes all responsibility for packing, repacking, marking and stamping, and the division of large consignments into smaller lots. It undertakes the fulfilment of all ports, consular, and customs regulations and the issuance of warrants and other documents of possession. The through bill of lading issued under this service, known as Bush Service Certificate, is a document of continuous possession, which enables the shipper to borrow money with greater ease on goods in transit or in warehouse because it is more definite and specific as to the responsibility of the issuer. This service is made possible through the merging of the facilities of the Bush Terminal Company with the facilities of 54 long established companies in Europe. The Bush service organization maintains 280 offices and has in addition over 900 appointed agents, covering the United States and Canada, and, across the Atlantic, every country from Great Britain to Persia, except Russia. (36)

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(34) See p. ~~150~~ 127 supra; also G. G. Huebner: Ocean Steamship Traffic Management (D'Appelton) pp. 103-104.

(35) Bush Terminal Company: "Now You Can Trade With Europe."

(36) Ibid,

To sum up: The policy of the commercial warehouse to meet the railroad competition in terminal storage has been to develop specialized service, thus creating new business which is not in direct competition with the railroad. These specialized services take the form of co-ordinated transportation-distribution, flexible storage, housing industry and export distribution. For less than carload freight and freight requiring distribution service, the patron prefers specialized facilities because his goods require a highly developed service for proper distribution. In such cases handling and distributing such merchandise are more important than mere storing, and goods of this nature will seek commercial warehouses or warehouses conducted by the railroad on the same basis as the commercial warehouses. (37) For export and import shipments awaiting transshipment, the patron does not always seek out the most up-to-date facilities; he wants protection for the goods and not distribution service. For patrons of this nature storage is the primary need and a transit shed suffices for his purposes. The goods will move out in solid lot and there will be required none of the specialized services of modern warehousing. In such cases the storage rate will be the determining factor as to whether the railroad terminal or the commercial warehouses will secure the storage business.

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(37) See Chapter II, pp. 42-66 under "Subsidiary Warehouses".

CHAPTER VIII

SUMMARY AND CONCLUSIONS

The growth of railroad warehousing may be ascribed to forces of transportation. As freight cars move, so moves commerce. In the early stages of railroad development, warehouses were unknown; goods were handled directly to and from freight cars. In time it became necessary to add a covered platform at points where goods were held awaiting cars for transportation. As traffic increased freight depots and warehouses were erected, and of necessity they became larger and more specialized to accommodate the increasing volume and growing diversity of traffic. (1)

Under the present transportation system, railroads offer a variety of warehousing service, such as, merchandise warehousing, cold storage, grain elevation and storage, commodity warehousing, bonded warehousing and terminal storage.

Merchandise warehousing makes it possible for the manufacturer to ship solid carloads of products to strategic centres, consigning the shipment to warehouses for distribution. (2) Upon arrival the cars are unloaded by the employees of the warehouse and the instructions of the consignor are followed in disposing the freight; part of the shipment may be stored awaiting further order and the rest delivered to a number of consignees located within the distribution district of the warehouse. This method, known as spot stock distribution, is imperative to the manufacturer who wants to meet new selling conditions. Hand to mouth buying, national advertising and distribution, and the principle of quick turnover of stock combine to bring to the factory a new demand. (3) In order to satisfy the new type of customers, it becomes necessary that delivery must be quicker than ever before. The buying public favors the merchant who displays a fresh and varied stock, and he can meet this requirement best by reducing the stock

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(1) For development of railroad merchandise warehouse, see pp. 10-14 supra; cold storage pp. 69-72 supra; grain elevation pp. 97-99 supra.

(2) Service of Merchandise Warehouse, see pp. 51-61 supra.

(3) Marketing changes, see pp. 177-185 supra.

volume of each variety carried. This procedure in turn creates the need for a frequent shuttle service between the base of supply and the display shelves. The merchandise warehouse is the logical base of supply and its service feeds the display shelves with regularity and speed. In addition to the time element, this method of distribution makes possible economy in freight charges. (4) Car lots are carried at a lower rate per hundred pounds than less than carload lots, and the warehouse permits a centre for breaking the carload shipments near the points of final destination; and because of its proximity to the terminal, the terminal warehouse saves for the consignee the cartage expenses. The saving in freight rate and in cartage expense helps to pay for other services rendered by the warehouse, such as, storage, re-coopering marking, sorting, invoicing, insurance, financing and store-door delivery. (5) Attached to many of the warehouses are bonded sections which handle freight under bond. (6)

Cities cannot be self-contained in the production of supplies for the maintenance of their existence, and food must be borne from all parts of the country to meet the daily demand. In order, that this may be successfully accomplished, food, especially perishables, must be placed in the hands of the consumer in a wholesome and sanitary condition and in a state of perfection as to maturity and ripeness. (7) To this end cold storage is necessary in the primary market in pre-cooling or chilling products until sufficient volume has been accumulated for economical shipment. In the movement from primary to terminal market, transportation and refrigeration are combined for the conservation of perishables in transit. At the terminal, cold storage is provided when the products enter an over-supplied market. This makes it possible either to hold shipments until surplus products are absorbed or to reconsign to other markets in need of such commodities. (8) At

(4) Transportation charges, see pp. ~~52-55~~ supra. 45-50

(5) Warehouse service, see pp. ~~51-61~~ supra. 45-54

(6) Bonded warehousing, see pp. ~~138-140~~ supra. 118-119

(7) Economic value of cold storage, see pp. ~~67-69; 90-93~~ supra. 77-80

(8) Reconsignment and diversion, see pp. ~~86-87~~ supra. 75-76

the produce terminal facilities are provided for storage, inspection, auction, weighing, repacking, and re-sorting. (9) These make possible a highly organized terminal market.

On American railroads, the problems encountered in the handling of the seasonal rush of grain are unique, in view of the immensity of the task. The question of adequate car and storage facilities are of paramount importance. During this season, stations where almost no freight originates during the rest of the year suddenly begin to ship large quantities of wheat daily. This concentrated movement lasts from July until October. (10) To accommodate this traffic, railroads developed elevation facilities along their lines both at interior terminal and at seaboard terminal points. (11) The purpose of such facilities is to furnish transportation elevation, but for the convenience of trade, commercial elevation also forms a part of the service. Transportation elevation consists of passing of the grain through an elevator for the purpose of transferring it from car to car or to vessel and obtaining its weight. Commercial elevation involves various processes in the treatment of the grain itself, such as, cleaning, mixing, clipping and drying. It is difficult to separate the two forms of elevation and the confusion has at times resulted in discriminatory practices. (12)

Refinement in storage service tends to increase, Experience in the handling of a single commodity promotes specialization, and competition among the carriers encourages further extension of the service. For this reason the carriers are extending special service in the handling of a number of commodities, such as cotton, tobacco, wool and hay, In the case of cotton, the Southern carriers extend a second storage in transit privilege in the Carolinas and Georgia in addition to the usual arrangement of compression and concentration in transit. (13) This additional transit service is

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(9) Service of Produce Terminals, pp. ~~80-88~~ supra. 71 - 77

(10) Grain movement, see pp. ~~94-97~~ supra. 91 - 93

(11) Railroads as Elevator men, see pp. ~~99-100~~ supra. 85 - 86

(12) Elevation allowances, see pp. ~~123-127~~ supra. 105 - 108

(13) Transit on cotton, see pp. ~~129-134~~ supra. 110 - 114

to enable the mills in that territory to finance their stock of cotton through the medium of the warehouse, which issues negotiable receipts as collateral for loans. In the case of export tobacco, the warehousing service includes inspection, sampling and re-coopering in addition to storage. (14) Rail carriers serving Newport News and Norfolk are keen competitors in the handling and storage of tobacco, and the present absorption of storage charges on export tobacco at Newport News shows how storage service may be successfully used as a means to attract traffic. In the handling of hay, hay houses exist in almost all cities. Their importance has declined considerably due to the advance of motor trucks, hay houses in many cities are converted into other uses. In the storage of other commodities, such as wool in the Northwest, beans in Michigan and California, potatoes in Maine, popcorn in Iowa, and so forth, such commodities are handled under the terminal storage rules provided in the tariffs for the carriage of the commodity.

The general rule to deliver the goods to the consignee at his place of business is not applicable to a common carrier by rail. (15) Delivery means either tender to the consignee or a reasonable opportunity offered for a movement of the property transported. If the consignee does not remove his goods within a certain stipulated period, known as "free time", the goods may be kept in vessel, car, depot, warehouse or place of delivery of the carrier, subject to the tariff charges for storage and to the carrier's responsibility as warehouseman only. Under the general rule, the free time period is 48 hours for domestic freight, and 10 to 20 days for export shipments. (16) As an inducement to traffic, the railroads at terminal points offer storage beyond free time "subject to reasonable capacity of their property and facilities". (17)

In furnishing the warehousing service, the railroad adopts three systems of operation: (1) direct operation, under which a

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(14) Tobacco Warehousing, see pp. ~~134-137~~ supra. 114-117

(15) Legal obligation, see pp. ~~156-161~~ supra. 133-137

(16) Terminal storage, see pp. ~~145-152~~ supra. 123-132

(17) Effects of railroad operation, see pp. ~~189-190~~ supra. 161-162

subsidiary company is formed to conduct the warehousing, cold storage, or grain elevation business under direct supervision and control of the railroad; (2) contract operation, under which a warehousing or elevating company is made through contract the agent of the railroad in performing certain terminal service, such as loading and unloading freight, furnishing station facilities or performing transportation elevation; and (3) leasing operation, under which the railroad leases its property to a warehousing or elevating company to conduct independent business, and through the lease the railroad expects to influence the traffic of the lessee over its lines.

The extent of direct operation is small but is increasing. (18) The reason is that the railroad operates warehouses for the purpose of developing traffic; contract and leasing operations fulfil such purpose. Under operation, attention must be given to the space available, the floor load capacity, the proper clear height between floor and ceiling, the proper mechanical equipment for raising and lowering between floors, the best and most economical access to the doors of railroad cars, to the tailboards of the trucks and to the transit shed alongside the ship, and the most efficient fire protection. (19) In the case of grain elevators, attention must be given to the capacity and pressure of the bins, the machinery for cleaning, drying, mixing and conditioning, as well as to internal economy in capacity turnover and capacity utilization. (20) All plants must be designed and laid out with the operating plan clearly in view—the space that may be available for storage, the space that may be reserved for handling, and whether the location and size of the plant will warrant operation by certain merchanical devices, such as tractors and trailers, carrying trucks, conveyors, moving platforms and telphers.

Under contract operation, the warehousing or elevating company performs certain service as agent to the railroad. (21)

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(18) Extent of operation, see pp. ~~42-46~~ supra. 38 - 41

(19) Warehouse facilities, see pp. ~~47-49~~ supra. 42 - 44

(20) Elevator facilities, see pp. ~~114-117~~ supra. 97 - 99

(21) Contract stipulations, see pp. ~~17-20, 73-74~~ supra. 15-18, 87 - 94

The contract warehouse assumes the obligation of furnishing platform facilities as public stations, of loading and unloading freight in behalf of the railroad, and of collecting freight charges and it further assumes the responsibility for the freight during the free time. The contract elevator company agrees to elevate, weigh, store during free time, and transfer, all grain to boats or vessel or other receptacles at the elevator on behalf of the railroad. On grain which is to be stored the elevator issues its own warehouse receipts in place of the railroad bill of lading and collects freight charges for the railroad. (22) The allowances for such contract service differ in amount and application according to traffic. This arrangement confers an advantage on the contract company over its competitors, but the advantage has been adjudged "incidental" and not "undue". (23) The Court holds that so long as the public is served to its reasonable satisfaction it is a matter of no importance who serves it. The railroad performs its whole duty to the public at large and to each individual when it affords the public all reasonable accommodation. When this is done, the railroad owes no duty to the public as to the particular agencies it shall select for that purpose. (24)

A large number of buildings and sites along the railroad right of way is leased to warehosing and elevating companies. (25) It is a general practice that lands in excess of anticipated needs for railroad use are usually acquired at stations with the intent of leasing to persons or corporations requiring direct and expeditious handling of freight to and from their places of business and controlling the movement of a relatively large volume of carload traffic. Such leases with large shippers tend to give permanence to inbound and outbound tonnage over the rails of the carrier providing the property. In a large warehouse or elevator of this type, a community interest is at once created. The Interstate Commerce Act contains no provision by which the Commission is

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(22) Elevator leasing operation, see pp. ~~101-110~~ supra. 85-94

(23) Legality, see pp. ~~30-35~~ supra. 26-32

(24) Express case, 117 U. S. 1.

(25) Leasing, see pp. ~~36-42~~ supra. 32-38

given direct power to prescribe or regulate the terms and conditions of the lease. The authority which the Commission has over such lease is entirely indirect and comes into being only when the terms are so favorable to the shipper that it is clear the real consideration for the lease must be found in traffic considerations. Until the final valuation of the railroad property is determined by the Commission, there is no basis upon which to judge the adequacy of the rental. (26)

The granting of the warehousing service is not done arbitrarily; it is done for legal and economic reasons. Transportation as defined by the Interstate Commerce Act includes all services in connection with the receipt, delivery, elevation, and transfer in transit, ventilation, refrigeration or icing, storage, and handling of property transported, and all common carriers subject to the Act are required to provide and furnish such transportation upon reasonable request therefor. (27) Interstate transportation, therefore, not only includes the carriage of goods from one state to another but also the storage and elevation service incident to transportation. (28) It is to fulfil the function of the common carrier that the railroad offers facilities for storage and elevation. In addition to fulfilling the legal requirements, the railroad is often forced into the position of a warehouseman for economic reasons; for example, to offer more flexible service as a means to induce traffic. This situation gives rise to two distinct forms of liability: first, that of common carrier, and second, that of warehouseman. As a common carrier, the railroad is bound in the same position as an insurer of the goods to cover all loss, except loss due to acts of God or to public enemies; whereas as a warehouseman, the railroad is responsible for due care and diligence only. (29)

The railroad is an industry of increasing return, that is, an industry in which an increase in the output of tarffic does not

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(26) Leasing operation, see pp. ~~26-39~~ supra. 32-35

(27) Section 1 clauses 3 and 4.

(28) Legal obligation, pp. 1~~56-161~~ supra. 133-137

(29) Liabilities of railroads as warehousemen, see pp. 1~~60-161~~ supra. 136-137

involve a corresponding increase in the cost of transportation. Any means that leads to a more complete utilization of the existing plant will be desirable. Warehousing fulfils such purpose. Its service equalizes competitive conditions, facilities the marketing and distribution of commodities, and introduces into the freight service a flexible element which is highly valuable from the standpoint of the shipper. Modern well conducted warehouses or elevators providing adequate storage, well lighted rooms and low insurance rates, and served directly by the railroad, offer economies not otherwise obtainable by a distributor of manufactured products or by a storer of grains. The economies are augmented by the latent recognition of the high value and attractiveness of air right over railroad property. (30) The increased value of property in busy communities and large cities and the competition among the national distributors, emphasize the need for terminal warehouse development. For this reason the Associated Grocery Manufacturers of America, Incorporated, in selecting their sites for co-operative warehouses, give preference to railroad properties. (31) Furthermore, with the rise of the motor truck, the inauguation of the container car service, and the operation of the off track station, the railroad often finds it advantageous to co-ordinate its facilities with those of the contract warehouseman, so that the entire service, pick-up, line-haul, storage, and delivery may be accomplished without any new investments or new facilities. (32) This co-ordination, in addition to saving an investment in trucks, has another important merit, every contract warehouseman is a solicitor for the railroad.

Railroad warehousing operation has met with opposition of the municipal and commercial warehouses. It is contended that the railroad storage rates at terminals are so low as to discourage the development of terminal warehouses by municipal and

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(30) Air rights development, see pp. ~~185-188~~ 158-160 supra.

(31) Co-operative warehousing, see pp. ~~182-185~~ 156-158 supra.

(32) Container car service, see pp. ~~167-170~~ 143-146 supra; off track station, see pp. ~~164-167~~ 141-143 supra; store-door service, see pp. ~~171-173~~ 146-148 supra.

commercial enterprises. (33) In reply the railroad points out the fact that its storage service is rendered in connection with line haul transportation and the storage charges should properly be fixed with some reference to the fact that it has received or expects to receive a line haul on the traffic. The theory upon which the present tariff is founded involves no attempt to base the storage charge or any other terminal charge on the actual cost of service, but with the sole purpose of keeping the competing ports at parity. (34) Although the municipal warehouse objects to the railroad storage rates as being low, its own rates are lower and its free time allowances longer than those at the railroad terminal. (35)

The commercial warehouse opposes the railroad entry into the warehousing field for competitive reasons. (36) The railroad development of terminal warehouses through the use of air rights has greatly increased storage space in each city. Whether the warehouse so built is operated directly by the railroad or leased to an independent company, the increase in space represents a corresponding increase in competition. Every new building looks forward to the demands of a generation as yet unborn. The new structure is therefore larger than can be filled at once, and obviously the surplus space has greater power to draw business from older concerns. Where the railroad engages an independent warehousing company to render certain transportation service as its agent, the arrangement generally favors the contract warehouse to the disadvantage of other warehouses. (37) At port terminals the railroad storage charge for through shipment is so low that it is impossible for the commercial warehouses to compete for the same kind of business. (38)

In answer to the above objections, it is necessary to go back to elementary principles. The railroad is a bailee which undertakes

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(33) Objections to railroad practice, see pp. ~~190-196~~ supra. 162-167
(34) Justification for Railroad practice, see pp. ~~196-204~~ supra. 167-175
(35) Policy of Municipal Warehouses, see ~~204-209~~ supra. 175-179
(36) Policy of Commercial Warehouses, see pp. ~~209-215~~ supra. 179-184
(37) Operation of contract warehouse, see pp. ~~20-29~~ supra. 18-26
(38) Terminal storage, see pp. ~~191-196~~ supra. 123-128

to transport for hire the goods of such members of the public as choose to demand the service. In its capacity as a bailee, it is obligated to treat its patrons without unjust descrimination; but except within the confines of its relation as bailee to its patrons, there is no obligation for similarity of treatment. It is justified in acting freely as in any other enterprise in the use of its facilities to the best advantage and in the selection of its agents. In the words of the Supreme Court, (39)

"It (railroad) is required, under all circumstances to do what may be reasonably necessary and suitable for the accommodation of passenger and shipper. But it is made under no obligation to refrain from using its property to the best advantage of the public and of itself. It is not bound to so use its property that others, having no business with, it, make profit to themselves. Its property is to be deemed, in every legal sense, private property as between it and those of the general public who have no occasion to use it for purposes of transportation."

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(39) Donovan vs. P. R. R., 199 U. S. 279; 50 L. ed. 192.

THE END

APPENDICES

In the following Appendices, a number of agreements between the railroads and warehouse companies are reproduced in full. In all cases the names of the parties to the agreements are omitted, following a precedent set by the Interstate Commerce Commission in "Transfer of Freight within St. Louis and East St. Louis" (155 I.C.C. 129,172) in which the Commission reproduces a contract between the railroads and the trucking companies at St. Louis with the names of the parties omitted. In all cases the agreements are taken from the public dockets of the Interstate Commerce Commission as indicated in the text.

APPENDEX Ia

Agreement relating to Contract Warehouse Operation.

(see Text pp. ~~16~~ to ~~30~~)
14 - 32

This agreement made this 28th day of July in the year of our Lord one thousand nine hundred and twenty seven (A.D. 1927) between the.....Railroad Company hereinafter called the "Railroad Company" party of the 1st part, and the..... Warehouse Company, a corporation organized and existing under the laws of the State of Pennsylvania, hereinafter called the "Warehouse Co.", party of the second part.

Whereas. the parties hereto desire to enter into an agreement with respect to the handling and storage of flour, grain and other merchandise at the warehouse of the said Warehouse Company situated on the plot of land bounded by Delaware Avenue, Kennilworth Street, Penn Street, and Bainbridge Street, in the City of Philadelphia, and the State of Pennsylvania.

Now, therefore this agreement witnesseth

First: That the Railroad Company convenants and agrees:

(a) To maintain railroad tracks adjacent to the Warehouse Company's said warehouse, and to promptly do the necessary shifting to enable its cars to reach the warehouse aforesaid for the purpose of taking from and delivering to the same all freight to be shipped therefrom or destined thereto and shall and will take and deliver the same over its lines, at non-discriminatory rates, and in the same manner and with the same promptness that it delivers and receives like traffic at any other terminal point controlled by it in the City of Philadelphia.

(b) To pay to the said Warehouse Company for all services rendered by it in and about the receipt and delivery of freight for account of the Railroad Company, both incoming and outgoing, at the said warehouse the amounts following: Three and one half cents ($3\frac{1}{2}$ cts.) per barrel for each barrel of flour up to fifty thousand (50,000) barrels per month; and thirty-five cents (35 cts.) per ton of two thousand (2000) pounds for each ton of merchandise; except that no payment shall be made by the

Railroad Company for freight for which, upon arrival at its destination, is or has been unclaimed or refused by the consignee and has been shared by the Railroad Company with the Warehouse Company for account of the owners thereof, nor upon bulk freight, nor upon freight the movement of which by the Railroad Company has been performed at a switching rate, nor upon material or supplies belonging to the Railroad Company; provided, however, that the Railroad Company shall have the right to cancel or abrogate this agreement and for the payment of allowances provided for in this paragraph in the event such action is authorized, permitted or required by any order, decision or law hereafter made rendered or enacted by any State or Federal Tribunal of competent jurisdiction, or in the event that these payments of allowances are held by any such tribunal to create undue preference or undue prejudice, upon such notice to the Warehouse Company in writing of its intention so to do as may be necessary to enable the Railroad Company to comply with such order, decision or law; and also provided that the Railroad Company shall have the right to cancel or abrogate at any time after sixty days' notice to the Warehouse Company in writing of its intention so to do the payments of allowances provided for in this paragraph, if it shall decide to cancel similar payments of allowances now or hereafter in effect with respect to other warehouses in seaboard cities on its System.

Second: The Warehouse Company convenants and agrees:

(a) To at all times accord to traffic passing over its lines of the Pennsylvania Railroad Company's System, of which the railroads of the Railroad Company form part, preference in the facilities furnished by the Warehouse Company over traffic passing over other lines, it being understood that without the consent of the Railroad Company the said facilities shall not be extended to traffic passing over other lines.

(b) To promptly load, unload and handle all freight received by it to be shipped over the lines of the Railroad Company or received by it for delivery to consignees and in the case of incoming freight to promptly notify the consignees of the arrival thereof.

(c) To be responsible to the Railroad Company for the prompt

collection of all freight and other charges upon inbound freight, payment to be made by the Warehouse Company to the Railroad Company on the fifth day of each month of freight and other charges due on account of all freight delivered to it during the preceeding month, excepting, however, any such charges which the Railroad Company may, from time to time, elect to collect direct from any consignee; and in order to secure the Railroad Company, the Warehouse Company shall furnish to it a bond with such good and sufficient sureties, and in such amount, as shall be approved by the Railroad Company, conditions for the prompt payment of the said freight and other charges and for the performance by the Warehouse Company of all its other convenants hereunder.

(d) To indemnify and hold harmless the Railroad Company for all damage to, or loss of, freight in the custody or control of the Warehouse Company, and all liability by reason thereof, and to keep an adequate and sufficient line of fire insurance on all such freight to cover the liability of the Railroad Company therefor.

(e) To promptly notify the Railroad Company in writing of the failure of any consignee to remove freight, and so long as it holds the said freight account of the Railroad Company, to observe and comply with all directions with respect to such freight which may be received by it from the Railroad Company.

(f) To protect and indemnify the Railroad Company from and against all manner of liability on account of any acts of omission or commission on the part of it, the said Warehouse Company, in respect to merchandise received by it at said warehouse, to be forwarded over the Railroad Company's lines or to be delivered to consignees, and also from and against all manner of liability on account of receipts for merchandise issued by it.

(g) To keep its said warehouse in good order and repair and properly equipped for the prompt and effective handling of the traffic delivered to and received by it.

Third: It is hereby mutually agreed that at the expiration of the period during which the Railroad Company shall currently allow freight to remain at its freight stations before delivering without charge to the consignee, freight delivered by the Railroad Company to the Warehouse Company which has not been

delivered to the consignee, or party entitled to receive the same, or which shall not by direction of said Railroad Company have been returned to the shipper thereof, or otherwise disposed of, shall be regarded and treated as stored with the Warehouse Comyany by the Railroad Company for account of the owners thereof, and thereupon the Warehouse Company shall be entitled to deal with the property and to make such charges for its custody as it may lawfully and properly do, and shall be further entitled to dispose of the same in such manner, and at such times, as it may lawfully and properly do for the purpose of realizing its charges thereon.

Fourth: It is further agreed that no assignment of this agreement shall be valid without the consent of the Railroad Company, and that this shall as well to involuntary assignments, and that upon the happening of any legal proceeding the effect of which shall be to divert the title or possession of the said Warehouse Company, the agreement shall, at the option of the Railroad Company, cease and determine; provided, however, that nothing contained in this Fourth Paragraph shall be construed to prevent the assignment of the income and revenues to the Merchants' Warehouse Company from this agreement as additional security for mortgage bonds to be issued by the said Warehouse Company.

Fifth: This agreement shall take effect as of the first day of September A.D. 1927 and shall continue in force and effect until the first day of February A.D. 1937; provided, however, that should the Warehouse Company in any respect violate or fail to comply with any of the conditions and convenants herein contained, then this agreement shall, at the option of the Railroad Company, on thirty (30) days written notice to the Warehouse Company, cease and determine and become absolutely void.

Sixth: This agreement shall be construed to be applicably only to the Warehouse situated on the plot of land bounded by Delaware Avenue Kennilworth Street, Penn Street and Bainbridge Street, as aforesaid, and in no wise or manner as impairing or affecting the terms and conditions of any other contract between the parties hereto in connection with any other premises. In the event of any arbitration being demanded and held under the

provisions of any other agreement now existing between the parties, this agreement shall not be received and read in evidence before the arbitration for any purpose whatsoever.

Seventh: This agreement and all its provisions shall be binding upon and endure to the benefit of the successers and assigns of each of the parties hereto.

In Witness Whereof the said party hereto have hereunto affixed their respective corporate seals, duly attested, the day and year first above written.

Signed and sealed and delivered in presence of

.....

The

By

Vice President

Attest

Secretary

By

President

Attest:

Secretary

APPENDIX Ib

Agreement relating to Contract Warehouse Operation

(see Text pp. ~~16 to 30~~ 14-32)

This agreement made this 27th day of December in the year of our Lord one thousand nine hundred and twenty two (1922 A.D.) between the.....Railroad Company, hereinafter called the "Railroad Company" party of the 1st part, and the..... Warehouse Co. of Baltimore City, hereinafter called the "Warehouse Co.", party of the second part;

Whereas, an agreement was entered into, bearing date the fourth of January A.D. 1916, between the parties hereto, with respect to the lease of said Railroad Company to said Warehouse Company of a certain piece of land situated at the southeasterly corner of Thames and Bond Streets, in the city of Baltimore, and State of Maryland, together with the docks, piers, warehouses, buildings and other improvements erected thereon, and also with respect to the handling of freight at said warehouse;

And Whereas, the said "Warehouse Company is now the owner of a building situated on said Thames Street adjoining the above mentioned warehouse leased to said Warehouse Company by said Railroad Company which it desire to use as an annex to said warehouse;

And Whereas, an agreement was entered into, bearing date the thirty-first day of December 1917, with respect to the handling of freight at said annex;

And Whereas, the said agreement, bearing date the thirty-first day of December A.D. 1917, expires by its own term at the end of the month of December A.D. 1922, and the parties hereto desire to enter into a new agreement with respect to the subject matter of said agreement.

New, Therefore, this Agreement Witnesseth, that, in consideration of the performance by each of the parties hereto of its convenants and agreements herein contained, the said parties hereto do convenant and agree as follows :—

First: That the Railroad Company convenants and agrees:

(a) To do the necessary shifting in order to enable its cars to reach the annex aforesaid for the purpose of taking from and delivering to the same all freight shipped therefrom, or destined thereto, and shall and will take and deliver the same over its lines at non-discriminatory rates, and in the same manner and with the same promptness as it delivers and receives like traffic at any other terminal point controlled by it in the City of Baltimore.

(b) To pay to the Warehouse Company for all services rendered by it in about the receipt and delivery of freight for account of the Railroad, both incoming and outgoing, thirty-five cents per ton for each ton of merchandise, except that no payment shall be made upon merchandise which it is customary for the Railroad Company to receive or to deliver directly from or to car on the track and not through railroad warehouse or across railroad platform, nor upon traffic the movement of which by the Railroad Company has been performed at a switching rate, nor upon material and supplies belonging to the Railroad Company Provided, however, that the Railroad Company shall have the right to cancel or abrogate, at any time after sixty days' notice to the Warehouse Company in writing of its attention so to do the payments or allowances in this First Article of this agreement provided for, if it shall decide to cancel similar payments or allowances now or hereafter in effect with respect to other warehouses in seaboard cities on its System.

Second: That the Warehouse Company convenants and agrees:

(a) To accord at all times, to traffic passing over the lines owned, leased, controlled and operated by the Railroad Company preference in the use of the facilities furnished by the Warehouse Company over traffic passing over other lines and without the consent of the Railroad Company the said facilities shall not be extended to traffic passing over other lines.

(b) To promptly and effectually load, unload and handle, at its own cost, all freight received by it to be shipped over the lines of the Railrord Company or received by it for delivery to the consignees, and in case of incoming freight to promptly notify

consignees of the arrival thereof, and to pay all running expenses of the said annex.

(c) To be responsible to the Railroad Company for the prompt collection of all freight and other charges upon inbound freight, including any demurrage or other charges which shall accrue on account of the failure of the consignee to promptly unload the cars and the consequent detention thereof beyond the period allowed for such unloading—payment to be made by the Warehouse Company to the Railroad Company the fifth day of each month of freight and other charges, due on account of all freight delivered to it during the preceeding month, excepting, however, any such charges as the Railroad Company may from time to time, elect to collect direct from any consignee, and in order to secure Railroad Company, Warehouse Company shall furnish to it a bond with such good and sufficient sureties, and in such amount, as shall be approved by Railroad Company, conditioned for the prompt payment of the said freight and other charges and for the performance by Warehouse Company of all its other convenants in this agreement contained.

(d) To indemnify and hold harmless the Railroad Company for all damage to, or loss of, freights in its custody or control, and all liability by reason thereof, and to keep an adequate and sufficient line of fire insurance on all such freight to cover the liability of the Railroad Company therefore.

(e) To promptly notify Railroad Company in writing of the failure of any consignee to remove freight and so long as it holds the said freight for account of the Railroad Company, to observe and comply with all directions with respect to such freight which may be received by it from the Railroad Company.

(f) To protect and indemnify the Railroad Company from and against all manner of liability on account of any acts of ommission or commission on the part of it, the said Warehouse Company in respect to merchandise received by it at said annex to be forwarded over the Railroad Company's lines or to be delivered to consignees, and also from and against all manner of liability on account of receipts for merchandise issued by it.

(g) To keep its said annex in good order and repair, and properly equipped for the prompt and effective handling of the traffic delivered to and received by it.

Third: It is hereby mutually agreed that at the expiration of the period during which the Railroad Company shall currently allow freight to remain at its warehouses before delivery without charges to the consignee, freight delivered by the Railroad Company to the Warehouse Company which has not been delivered to consignee or party entitled to receive the same, or which shall not by direction of said Railroad Company have been returned to the shipper thereof, or otherwise disposed of, shall be regarded and treated as stored with Warehouse Company by Railroad Company for account of the owners thereof, and thereupon the Warehouse Company shall be entitled to deal with the property and to make such charges for its custody as it may lawfully and properly do, and shall be further entitled to dispose of the same in such manner and at such times as it may lawfully and properly do for the purpose of realizing its charges thereon.

Fourth: This agreement shall take effect as of the first day of January A.D. 1923, and shall continue in full force and effect for the term of one year from said date and thereafter from year to year, unless and until terminated at the end of said year, or at the end of any one year thereafter upon either party hereto giving the other party sixty (60) days' previous written notice of its intention to do so. Provided, however, that should the control of the Warehouse Company pass into the hands of parties inimical to the interests of the Railroad Company or should the Warehouse Company in any respect violate or fail to comply with any of the conditions and convenants therein contained, then this agreement shall at the option of the Railroad Company cease, determine and become absolutely void.

Fifth: In case question as to the proper custodian of any of the provisions herein contained or difference as to any act or duty claimed to be involved in the performance hereof shall arise, if the same cannot be amiably adjusted by and between the parties, it shall be submitted to referees to be chosen in the manner following: The party demanding the reference shall serve upon the other party a notice of such demand, stating the question upon

which it demands the judgment of the referees, and the name of one referee by it chosen. The party so notified shall, within ten days after receiving such notice, select a second referee and notify the other party thereof in writing, or if it shall fail to select a referee, the referee selected by the party demanding the reference shall select the second referee. The referees so selected shall within a reasonable time, meet and select a third referee and fix a time and place for hearing the parties of which they shall be notified in writing. If any referee shall fail or refuse to act, the party by whom he was chosen shall select another to act in his place. The award of any two of said referees, made after hearing the party or parties who have attended in compliance with the notice to be as above stated, shall be final and binding upon the parties, and they shall severally expressly agree to be bound thereby.

Sixth: That the herein before recited agreement, bearing date the thirty-first day of December A.D. 1917, be, and the same is, hereby terminated as of the thirty-first day of December A.D. 1922.

Seventh: It is further agreed that no assignment of this agreement shall be valid without the consent of the Railroad Company, and that this shall apply as well to involuntary assignments, and that upon the happening of any legal proceedings the effect of which shall be to divest the title or possession of the Warehouse Company, this agreement shall at the option of the Railroad Company cease and determine.

Eighth: This agreement and all its provisions shall be binding upon and ensure to the benefit of the successors and assigns of each of the parties hereto.

In Witness Whereof, the said parties hereto have, caused their respective corporate seals to be hereto affixed, duly attested the day and year first herein before written.

Signed, sealed and delivered in presence of :

....
Notary Public

.....**Railroad Co.**

By.....vice president

.....**Warehouse Co.**

By.....president.

APPENDIX IIa

Documents relating to Cold Storage Operation

(see Text pp. ~~73-74~~ 69-68)

Agreement between.....Cold Storage Co. and.....Railroad

August 9, 1922.

Mr.....,
President,.....**Cold Storage Co.,**
Philadelphia, Pa.

Dear Sir :

In accordance with understanding reached at our conference here today, our Company will agree to give your Company 50 cents per ton of 2,000 pounds for the handling of dairy products, viz : Butter, Eggs, Dressed Poultry and Cheese, transported over our lines, excluding traffic handled in switching service, or delivered by connecting lines to the Pennsylvania System at junctions in Philadelphia, under the following conditions :

1. The Railroad shall publish in its tariff that the Quaker City Cold Storage Company is a point of delivery to which the above named commodities may be consigned.
2. The Railroad will shift cars containing these commodities to your plant for unloading without cost.

3. The Cold Storage Company to act as agent for the Railroad Company in unloading cars, promptly notifying consignees of arrival, delivery to consignees and collection of freight charges, allowing the free time to consignee as provided for in public tariffs of the Railroad Company. Beyond the free time period, as aforestated, the Quaker City Cold Storage Company shall have the right to charge consignees for storage of any freight held beyond the free time period, or for any service rendered or facilities furnished by it, at customary rates.

4. The Cold Storage Company to indemnify and hold harmless the Railroad Company for all damage to or loss of freight while in its custody or control, and all liability by reason thereof after delivery

by the Railroad Company to the Quaker City Cold Storage Company; and in order to properly protect the Railroad Company in this respect the Quaker City Cold Storage Company shall furnish a bond under conditions prescribed by the Treasurer of the Railroad Company.

5. The Cold Storage Company, will, to the best of its ability, provide sufficient space to accommodate the traffic, which will arrive currently under this agreement, and will give preference in the handling of traffic tendered for delivery by the Pennsylvania Railroad under this agreement over other traffic; the Quaker City Cold Storage Company to at all times use its best endeavors and influence in routing freight over the Pennsylvania System.

6. This arrangement to be terminable in thirty (30) days' written notice by either party, with sufficient grace to allow the Railroad Company to issue necessary changes in tariffs.

7. The effective date of arrangement to be the date of the published tariff authorizing the allowances becomes effective.

The details for collection of freight charges and records in connection therewith are to be arranged subject to such regulation as may be worked out between our Auditor and your Company.

I will arrange with our Insurance Department to carry insurance to cover freight during the period that free storage must be accorded.

Will you please write me at your early convenience of the acceptance of the agreement under conditions specified. If later on a formal agreement seems desirable we can arrange to proceed accordingly.

Yours very truly,

Traffic Manager.

.....Cold Storage Company,
Philadelphia, Pa.

.....Railroad Company,
Traffic Department,
Philadelphia, Pa.

August 15, 1922.

Attention of Mr.....

Gentlemen :

We are in receipt of your letter of August 9, 1922, in reference to our company handling dairy products over your lines, excluding traffic handling in switching service or delivered by connecting lines to the Railroad at Junctions in Philadelphia. And in accordance with the understanding had by your company with our Mr. Serrill, and in further conformance with the terms of your letter of August 9th, we will accept your proposal in full as contained in items 1, 2, 3, 4, 5, 6, and 7. It being understood, however, under the terms of section 4, where it is stated that we are to indemnify and hold harmless your company for all damage to or loss in freight while in our custody or control, and all liability by reason thereof after delivery by the Railroad Company to our Company, that such liability therein specified is only such liability as is concurrent with the duties of any other agent under similar conditions, that is upon receipt of all cars we will notify your Company of the condition of the seal on the car, and upon breaking of the seal we will also notify your Company as to the quantity and quality of the goods contained in the car. But it is understood further, nevertheless, that after the goods are unloaded, on our platform, we will be liable for such goods either damaged or lost.

Hoping this is satisfactory to your Company and appreciating your kindness in this matter, as we feel this arrangement will be of mutual benefit to each company, we remain.

Yours very truly,

.....Cold Storage Company,

President.

APPENDIX IIb.

Agreement relating to Government Inspection

(see Text pp. 73-74)

This agreement between the Bureau of Agricultural Economics United States Department of Agriculture and the Seaboard Terminal and Refrigrating Corporation of Jersey City, New Jersey, witnesseth :

That the Seaboard Terminal and Refrigerating Corporation, hereby requests inspection of a minimum of one thousand (1,000) cars of fruits and vegetables received by the Seaboard Terminal and Refrigerating Corporation at its plant in Jersey City, New Jersey for a twelve month period. Inspection will be by the inspectors either, while cars are being unloaded or after the goods have been placed in storage and the Seaboard Terminal and Refrigerating Corporation agree to furnish labor to open and close all packages which are examined.

In consideration of the large volume of work offered and the condition favorable to rapid inspection, United States Bureau of Agricultural Economics agrees to make these inspections at rate of $2.00 per carload. In order to insure the Bureau of Agricultural Economics against financial loss the first five hundred (500) inspection will be made at the rate of $4.00 per carload. The next five hundred (500) inspection will be made free of charge and all inspection thereafter for the remainder of the year, will be made at the rate of $2.00 per car. It is agreed that all bills for the service shall be paid monthly.

This agreement shall be effective June 15, 1929 and shall continue to be in effect for a period of twelve months.

Signed on behalf of the Seaboard Terminal and Refrigerating Corporation.

Dated Vice President General Manager

Signed on behalf of the Bureau of Agricultural Economics.

Dated Acting Chief of Bureau

Approved

Secretary of Agriculture.

APPENDIX IIc

(see Text p. 75)

THE UNION FRUIT AUCTION COMPANY

Pennsylvania Lines Produce Station

Pittsburgh, Pennsylvania.

Rules and Terms of Sales.

Effective May 8, 1916.

I. The Union Fruit Auction Company will hold sales daily (except Sunday) between the hours of 5 a.m. and 6 p.m. whenever arrival and quantity of fruit offered will warrant.

II. During the season of Citrus Sales held on Monday, Wednesday, Thursday, and Friday are scheduled to start at 9:30 a.m.

III. During the season the daily Deciduous Sales are scheduled to start at 9 a.m.

IV. Manifests of cars intended for any sale should be delivered to the Auction Company not later than 4 p.m. of the day previous to such intended sale. The Auction Company cannot and does not guarantee that cars will be placed by the Railroad Company in time for unloading and display for any particular sale, but the Auction Company will make all reasonable and proper efforts to that end impartially and as far as platform space and time with permit.

V. Fruits will be unloaded, opened and displayed by Auction employees impartially. Legitimate buyers will be allowed to properly inspect other than the packages exposed before the sale.

VI. All fruit is sold "as it is" without warranty or undertaking of any kind, express is implied, as to its soundness, condition or character. Sales are not made by sample. For the convenience of buyers a portion of the fruit of each car will be exhibited on the platform when possible, but it is not represented that the bulk of the car or lot is like the portion exhibited, and no allowances on purchases will be made for anything whatsoever. Any fruit rejected by the buyer will be resold for his account.

VII. All sales are made for cash and payment is due at the time of sale. Buyers whose credit the Auction Company may approve may make individual arrangements with the Auction Company therefore, but the Auction Company reserves the right to demand cash for purchases from any buyer at any time.

VIII. Fruit will be sold to the highest responsible bidder with the privilege of buying the entire car, or any part thereof not less than 20 boxes of oranges or crates or deciduous fruit or ten boxes of lemons or grapefruit, unless this privilege be withdrawn by announcement by auctioneer, whenever the number of packages in any particular line or balance left in any line is less than the minimum above specified, such entire line or balance may be taken without reference to such minimums.

IX. All purchasers will pay to the Auction Company a handling and delivery charge of five (5) cents per box on oranges, lemons, box pears, box apples, almeria grapes, dorn grapes, pineapples; three (3) cents per crate in California grapes, pomegranates, persimons, peaches; plums, and similar packages; ten (10) cents per package on barrel goods. Deliveries will be made to downtown freight stations of the Baltimore and Ohio, Lake Erie and Pennsylvania Railroad Company, the Allegheny Market and the downtown district between Grant Street and the "Point". All buyers who haul their own purchases will be refunded two of the five, or of the three, and five of the ten cents charged as above.

X. All goods sold are on Railroad property and must be removed on the day of sale. If not so removed they will be subject to storage charges accruing thereafter in accordance with published tariff of the Pennsylvania Railroad Company and the Pennsylvania Lines, on file and open for inspection in the office of the Railroad Company in this building, and which charges must be paid by the purchaser.

XI. The Auction Company does not act as a direct receiver.

XII. Rates of Commission for Selling:

Pittsburgh receivers and shippers of fruit and produce who are represented in Pittsburgh will pay two and one half ($2\frac{1}{2}$)

per cent of the gross sales on foreign lemons, foreign and eastern grapes, Porto Rican, Cuban and Florida citrous fruits, eastern apples, and other eastern fruits and vegetables as well as western vegetables. On western citrus, deciduous fruits and box apples a rate of two (2) per cent will be charged. The Auction Company will contract with the receivers on California citrus fruits for regular suppliers, all Pittsburgh receipts to be sold exclusively at auction for one fourth ($\frac{1}{4}$) per cent less.

We will not be responsible for goods left on platform after three (3) p.m. on the day of sale.

On goods left on platform the day following the sale, a charge of ten (10) cents per package may be made by the Auction Company in addition to the charge for storage assessed by the Railroad Company.

On all cars catalogued and offered for sale, if withdrawn and not subsequently sold at auction, a charge of at least $20,00 will be made.

All sales will start at 8:30 a.m. until further notice.

APPENDIX IIIa

GRAIN ELEVATOR LEASES

(see Text pp. ~~105-107~~ 90-92)

This indenture made this first day of August A.D. 1913 by and between the.....Railroad Company, a corporation hereinafter designated the Lessor, and.....hereinafter designated as the Lessee, witnesseth :

That for and in consideration of the convenants and agreements herein contained, to be kept and performed by said lessee, and the rental herein reserved, said lessor has leased, demised and let and does hereby lease, demise and let, to said lessee, the following described property in the city of Kansas City, county of Wyandotte, state of Kansas, to wit :

That certain grain elevator and fire proof bleacher, commonly known as the "The Terminal Elevator" located on the following described premises in the county of Wyandotte and state of Kansas. Beginning at the intersection of the east line of the right of way of the Railway Company, thence north along the west line of Seventh Street a distance of one hundred and eighty-eight (188) feet to a point ten (10) feet southerly from the center line of the most southerly track; thence parallel to and ten (10) feet distant southerly from said southerly track a distance of two hundred and sixty (260) feet; thence soueasterly at right angles a distance of one hundred and fifty (150) feet to the southerly right of way line thence easterly along said southerly right of way line a distance of two hundred and thirty five (235) feet more or less to the place of beginning, containing, ninety seven (0.97) hundredth acres; together with all machinery, tools and appliances in, about or appurtenant to said grain elevator; but none of the railroad tracks at or adjacent to said elevator shall be included within this lease.

To have and to hold the above described premises for the term of five (5) years from the first day of August A.D. 1913; hereby giving and granting to the lessee the option to renew this lease for an additional term of five (5) years from and after the first day of August A.D. 1913, upon the same term and conditions

as are herein set forth, provided such option is exercised between the first day of January A.D. 1918 and the first day of February A.D. 1918.

In consideration hereof, the lessee hereby convenants and agrees as follows :

That he will pay as rent for said demised premises the sum of fifteen thousand dollars ($15,000) per annum, payable monthly in advance at the rate of twelve hundred and fifty dollars (1,250) per month on the first day of each month during the term of this lease.

That he will not under-let said premises or any part thereof, or assign this lease without the written consent of the lessor.

That any violation of or failure to comply with any of the foregoing conditions shall terminate this lease without any notice or acts upon the part of the lessor, and thereupon the lessor may re-enter and take possession of said premises, with or without process of law.

All the terms, conditions and convenants of this lease shall, during its continuance, be binding upon the parties hereto, their successors and assigns.

The lessee hereby accepts the foregoing lease, and convenants and agrees to faithfully perform and observe all of the terms conditions and requirements herein contained; and he further agrees to surrender said demised premises at any termination hereof in as good condition as when received by him, ordinary wear and tear and damage by fire and the elements excepted.

It is mutually agreed that should said demised premises be destroyed or so damaged by fire as to render the same untenantable, this lease shall terminate and be at an end.

It is further mutually agreed that this lease shall supersede and take the place of that certain agreement and indenture of lease dated July 1, A.D. 1904 entered into between of the city of Chicago, county of Cook, and state of Illinois, and the Railway Company, covering the premises hereinbefore described.

In witness whereof the said Railway Company has caused this indenture to be signed by its duly authorized officers, and the said J. Rosenbaum has hereunto set his hand and seal the day and year first above written.

.....**Railway Company**

Attest. By.....
Second President

.....

APPENDIX IIIb

GRAIN ELEVATOR LEASE

(see Text pp. ~~109~~ 92)

This Agreement made in duplicate this 30th day of June in the year One thousand nine hundred eleven between the..... Company a corporation organized and existing under the laws of the State of New Jersey (hereinafter called the Elevating Company) party of the first part, and the.....Railroad Company, a corporation organized and existing under the laws of the State of New York (hereinafter called the Railroad Company) party of the second part;

Witnesseth, that

Whereas, the Elevating Company has leased from the Long Dock Company a certain grain elevator, with its appurtenances, known as the Erie Elevator, located on the water front of the Hudson River in the City of Jersey City, State of New Jersey, which is conveniently located for the elevating, storing and transferring to boats and vessels of grain shipped over the line of the Railroad Company and to be delivered by it or on its behalf at shipside or other points within the Harbor of New York.

Now Therefore, in consideration of the promises and of the mutual covenants and agreements hereafter contained it is agreed as follows:

First: The Elevating Company hereby agrees to elevate, weight, store for ten days when required and transfer to boats or vessels or other receptacles at the elevator, on behalf of the Railroad Company all grain delivered to said elevator by the Railroad Company.

Second: On grain which is ordered on storage the Elevating Company agrees to issue its warehouse receipts in place of the railroad bills of lading covering the grain and at the time of such insurance to take up such bills of lading properly endorsed and safely retain and preserve the same, and to collect and remit to the

Railroad Company the transportation or other charges against such grain up to the time of its receipt by the elevator.

Third: The Railroad Company agrees to pay to the Elevating Company for all services performed by it on behalf of the Railroad Company under this agreement, one cent per bushel of grain elevator for the Railroad Company by the Erie Company and in addition thereto one quarter cent per bushel on grain not for export so elevated which is stored for ten days or less in all cases where the tariff of the Railroad Company filed with the Interstate Commerce Commission provides for the collection from the consignee or owner of the grain one quarter cent per bushel for receiving, weighing and storing for the first ten days, or any part thereof, and the Railroad Company further agrees to pay clerical expenses to the amount of $1,000.00 per year to cover in part the expense of collection of its charges and securing of bills of lading as above prescribed.

Fourth: Cars containing grain shall be delivered to the Elevating Company at said Erie Elevating Company at said Erie Elevating by the Railroad Company by placing said cars on premises described on the lease to the Elevating Company by the Long Dock Company and thereafter the Elevating Company hereby assumes the full measure of responsibility of the Railroad Company for the grain contained in cars so delivered during the possession of said grain by the Elevating Company from the time of such delivery at said Erie Elevator until delivery from the elevator or until lawful delivery thereat by the Elevating Company from its possession to the owner or consignee, lighterman or other proper party. The Elevating Company agrees to indemnify and save harmless the Railroad Company from and against any loss, damage or liability arising out of, or in connection with loss, damage or injury to the grain during the time in which the Elevating Company assumes responsibility therefor as above stated.

Fifth: This agreement shall remain in force to July 1st, 1916, provided, however, that it shall terminate without further action by either party extemporaneously with any earlier termination of the

lease of the Erie Elevator by the Long Dock Company to the Elevating Company.

In witness whereof, the parties hereto have caused these presents to be executed as of the day and year hereinbefore first above written.

Attest .....**Railroad Company**

Secretary By.....
President

Attest **The**.....**Company**

Secretary By.....
Vice President

SUPPLEMENTARY AGREEMENT: dated May, 1914

The Railroad Company agrees to pay to the Elevating Company for all services performed by it in behalf of the Railroad Company under this agreement, five eights ($\frac{5}{8}$) of a cent per bushel of oats, and one (1) cent per bushel of all other grains elevated for the Railroad Company by het Erie Elevator, and in addition thereto one quarter ($\frac{1}{4}$) cent per bushel of grain not for export so elevated which is stored for ten (10) days or less in all cases where the tariff of the Railroad Company filed with the Interstate Commerce Commission provides for the collection from the consignee or owner of the grain of one quarter ($\frac{1}{4}$) cent per bushel for receiving, weighing and storing for the first ten (10) days, or any part thereof.

APPENDIX IIIc

RAILROAD ELEVATOR LEASE FORM

(see Text pp. ~~107~~ to ~~110~~) 92 - 94

Railway Company, hereinafter called Railway Company, lessor in consideration of the rents to be paid and covenants to be performed by.....lessee, leases to the lessee the following premises, situated.....in the County of.....and State of.....; viz.:

To have and to hold subject to the provisions following and until this lease is terminated as hereinafter provided;

1. As annual rental the lessee shall pay the sum of..... dollars, together with all taxes and assessments levied or assessed against the premises during the term hereof, except special assessments for public improvements in excess of Twenty-five Dollars ($25.00) in any one year, of which latter assessments the lessee will pay a sum equal to six per cent of the total amount thereof per annum.

2. The premises shall be used for the exclusive purpose of receiving, storing, shipping, elevating and delivering grain.

3. The lessee shall construct and complete upon the premises to the satisfaction and approval of the Railway Company and have in all respects ready for operation on or before.....19 , a grain elevator sufficient in capacity to hold... .....bushels, with all necessary fixtures, machinery, appliances and appurtenances for the safe and prompt receipt, elevation and delivery on board cars of grain, and shall maintain and operate the same for the public use without discrimination; and to the reasonable satisfaction of the Railway Company; and shall enlarge the elevator and its appliances from time to time when and as required by the Railway Company. If the elevator shall at any time become full of grain, the lessee shall immediately cause sufficient to be shipped therefrom to keep it in condition to receive such as may be offered. By keeping the elevator open for the shipment of grain is meant, not only that the elevator shall be open to receive and store grain,

but that it shall have sufficient and proper room to receive and store all grain when it is offered.

4. The lessee will paint and keep painted, with the standard color of paint adopted by the Railway Company for its station buildings, any building upon the premises, and will not permit the placing of any advertising matter upon the improvements, nor upon any part of leased premises, except such signs as may be necessary to advertise the lessee's own business.

5. The lessee agrees to comply with the Railway Company's rules in connection with maintaining clearance of buildings and other structures or obstructions with railroad tracks; if for the purpose of unloading or loading cars it is necessary to encroach on this clearance it must be done by a movable spout which will always provide the full clearance when not in use.

6. No other railroad or transportation company, or person engaged in transportation, shall be allowed to use any track now or hereafter upon or extending to the premises without permission in writing of the Railway Company, and the Railway Company shall have the exclusive right of carrying all grain to be transported by rail to or from said elevator.

7. It is understood by the parties that the leased premises are in dangerous proximity to the tracks of the Railway Company, and that persons and property on the leased premises will be in danger of injury or destruction by fire or other causes incident to the operation of this lease without which the same would not be granted, that the lessee assumes all risk of personal injury to the lessee and to the officers, servants, employes, or customers of the lessee while on said premises, and all risk of loss, damage or destruction to buildings or contents or to any other property brought upon or in proximity to the leased premises by the lessee, or by any other person with the consent or knowledge of the lessee, without regard to whether such loss be occasioned by fire or sparks from locomotive engines or other causes incident to or arising from the movement of locomotive, trains or cars, misplaced switches or in any respect from the operation of a railway, or to whether such loss or damage be the result of negligence or

misconduct of any person in the employ or service of the Railway Company, or of defective appliances, engines or machinery.

8. Without the written consent of the Railway Company, the lessee shall not assign this lease or any interest therein, nor sublet, and no heir, executor, administrator, receiver, master, sheriff, trustee in bankruptcy or other assignee by operation of law shall assign or sublet without such written consent.

9. The lessee will not charge more than two cents per bushel for receiving, storing not longer than ten days, elevating and delivering grain at said elevator, or such less rate as the Railway Company shall from time to time direct; and will clean all grain delivered at the elevator if required at prices satisfactory to the Railway Company. The Railway Company shall at all times, by such agent or agents as it may appoint, have free access to the elevator for the purpose of inspecting the receiving, weighing, elevating and delivering of grain thereat, and also free access to the books, papers and vouchers of the lessee connected with the business; and shall have the right to send competent persons to test the scales, the expense of such tests to be paid by the lessee.

10. If the lessee shall fail to construct and complete the elevator ready for operation within the time above limited, or shall fail to furnish facilities and keep it open while grain is being offered for sale or storage, or fail to operate the business to the satisfaction of the Railway Company, or fail to comply with any covenant or agreement hereof, the Railway Company may declare this lease terminated and thereupon shall be restored to the possession of the leased premises; in such case, unless the Railway Company shall elect to purchase the improvements as hereinafter provided, the lessee shall remove the same, and in case of failure to do so within thirty days the same shall become the property of the Railway Company.

11. The Railway Company may also, without assigning any reason therefor, terminate this lease at any time upon six months written notice, and in that event the lessee shall remove the improvements within six months after said notice (unless the Railway Company shall elect to purchase them as hereinafter

provided) and surrender said premises to the Railway Company, and in case of failure so to do such improvements shall become the property of the Railway Company. Any notice of termination by the Railway Company shall be good if served personally upon the lessee or posted upon the leased premises, or if deposited in a United States postoffice addressed to the lessee at the following address, viz.:

12. In case of the non-payment of rental or taxes as herein provided, the same shall until fully paid, constitute a lien upon any building or other property owned by the lessee and located upon the leased premises, and the lien may be foreclosed according to law.

13. The Railway Company remains free to lease at said station other elevator and warehouse sites.

14. The Railway Company shall have the right, upon payment of fair cash value thereof, to purchase at any time the buildings, fixtures, machinery and appliances erected or placed on the leased premises by the lessee, the value to be determined, if the parties do not agree, by three disinterested and competent referees, one to be named by each party and the third by the two so chosen; the written award of any two shall be binding upon the parties; and upon the payment or tender of the value so determined the said property shall vest in and belong to the Railway Company and this lease be thereby terminated.

15. The lessee may terminate this lease by giving thirty days' notice in writing to the Right of Way Commissioner of the Railway Company at his office in St. Paul, Minnesota.

16. The lessee agrees that he will not permit the accumulation of any material or refuse adjacent to the tracks of the Railway Company and will at all times keep the premises and adjoining land up to said tracks in a clean and sanitary condition to the satisfaction of the Division Superintendent of the Railway Company.

17. On the termination of this lease the lessee will fill up all excavations on the premises, remove all material, and deliver up

the premises peaceably and quietly and in a clean and sanitary condition; and if lessee fails so to do the Railway Company may appropriate any material thereon to its own use without compensation, or may remove the same and level the ground at the cost of the lessee.

18. The cost of making any necessary change in the Railway Company's telegraph line shall be borne by the lessee.

In witness whereof the parties have executed these presents this.....day of.....19

Witnesses to Signature of Lessee : .....**Railway Company**

By..... .....

Right of Way Commissioner Lessee

APPENDIX IV

Circular Letters sent to Railroad Officials for information regarding the extent of Warehouse Operation.

Dear Sir;

I shall appreciate it greatly if you will kindly furnish me the names and locations of the warehouses, grain elevators and cold storage warehouses owned or operated by your road.

I am a student in the Graduate School of University of Pennsylvania, and am making a study on "Railroad Warehousing Services". You will help me greatly if you will just give me the names of your warehouses, as I shall be able to get their capacity, services, etc. from trade directories once I have the names. I am enclosing a stamped self-addressed envelope for your answer.

Thanking you in anticipation,

Yours very truly,

(Felton Chow.)

APPENDIX Va

AGREEMENT RELATING TO MOTOR SERVICE.

(see Text pp. ~~163~~ to ~~173~~)
'10-'18

Contract, made this 18th day of July 1929, by and between the Railway Company, herein called "Railway Company" and the Transportation Company, herein called Transportation Company, witnesseth :

1. Each party, as a private carrier, covenants that it will, and its successors and assigns shall, upon demand of the other party, furnish a special vehicle for freight, main, baggage or express of the other party or any of its subsidiary or affiliated companies, and cause same to be moved between any points on its respective line or route; that it will bear and indemnify such each party against all changes, rates and fares of every sort and kind which may be due it or to any of its subsidiary or affiliated companies, on account of such transportation, except as set forth in section 3 hereof.

2. Each party reserves the right to fill out the load of any car or vehicle furnished the other party under the terms of this contract with its own freight, mail, baggage and/or express when not to the detriment of such other party.

3. Railway Company covenants that it will pay Transportation Company monthly twenty-five cents (25 cts.) for each mile which the Transportation Company, at Railway Company's demand, transports a truck or trailer of freight, mail, baggage or express for it during the preceding calendar month.

4. Transportation Company convenants that it will pay Railway Company monthly fifty cents (50 cts.) for each mile which the Railway Company, at Transportation Company's demand, transports a railway car of freight, mail, baggage or express for it during the preceding calendar month.

In Testimony whereof, the parties hereto have hereunto set their hands and seals the day and year first above written.

.....Railway Company

.....Transportation Company

APPENDIX Vb

AGREEMENT RELATING TO MOTOR SERVICE.

(see Text pp. ~~163 to 178~~) 170 - 188

This agreement made the.....day of....., one thousand nine hundred and twenty-nine (1929) between the Railroad, lessee of the work and property of the Railway Company, hereinafter called the "Lessor" of the one part, and the Carloading and Distributing Company, a corporation of the State of New York (address 40 Rector Street, New York City, New York) hereinafter called the "Lessee" of the other part:

Witnesseth, that the Lessor hereby demise to the Lessee all that certain portion of shed "A" situated at Monument, Davis and Centre Streets in the City of Baltimore, Maryland, lying westward of the centre line between the two tracks constructed in the said shed, containing twenty seven thousand four hundred fifty (27,450) square feet, more or less, together with two thousand five hundred twenty five (2,525) square feet of office space on the second floor of said shed.

To Hold the said premises unto the Lessee as tenant at will of the Lessor at and for the rent or sum of seven hundred fifty dollars ($750) a month, to begin on the first day of August, one thousand nine hundred and twenty-eight (1928) and to be paid monthly, in advance, during the continuance of this lease, at the office of the Agent for the Lessor's Real Estate Department, Southeast corner Centre and Culbert Streets, Baltimore, Maryland, or at such other place as the Lessor may from time to time designate.

The Lessee hereby convenants and agrees to and with the Lessor as follows:

First: To become and continue to be the tenant at will of the Lessor under the conditions hereof, and to pay the said rent as above provided keep in repair and maintain, at its own cost and expense, the demise premises in good order and conditions; to fully comply with all requirements and regulations of the Board of

Health, Police Department, Fire Department Building Department and all other departments and Municipal authorities and all ordinances and laws of the City of Baltimore in the State of Maryland, and to pay or cause to be paid when they become due all fines and penalties imposed by law by said Departments, authorities or any of them on said premises or upon the Lessor for non-compliance with any of the said requirements or ordinances; to quit and deliver up possession of said premises to Lessor upon the expiration of the time mentioned in any notice to quit given as hereinafter provided in like good order and repair, ordinary wear and bear excepted; and that upon the expiration of such notice the said tenancy shall cease and the said Lessor shall have the right forthwith to re-enter upon and occupy the said premises without any further or other notice, proceeding or process whatsoever.

Second: At its own cost and expense to provide for all heat, water, gas and electric current and other services in connection with Lessee's use of the demise premises and promptly pay all charges therefor.

Third: Not (under penalty of forfeiture of this lease) to commit or suffer to be done or committed, any cut or thing whereby or in consequence whereof the conditions or stipulations of the policy or policies of insurance on the said premises shall, become voided or suspended; or occupy or permit to be occupied, the said premises, otherwise than in connection with the assembling, handling, distributing and storage of goods, wares and merchandise and other materials transported over the railroad of the Lessor; and not to assign or transfer this agreement or underlet the said premises or any part thereof without the procured written consent of the Lessor, an assignment written the meaning of this agreement being understood and intended to comprehend voluntarily the voluntary action of the lessee but also every levy or sale or execution or legal process, and every assignment or sale in bankruptcy or in solvancy, or under any other compulsory procedure or order of court.

Fourth: To save and keep harmless and indemnify the Lessor from and against all claims for damage, loss, and expense in connection with the maintenance, use and operation of the demised

premises by the Lessee, and the event of any action or proceeding being substituted against the Lessor for any cause or action arising out the conduct, management or condition of said premises by the Lessee, or arising out of its conduct or management of any street or sidewalk, adjoining said premises, or on account of any condition created by it, or if any accident to any person or persons shall occur on or in proximity to said premises by reason of the viligence of the Lessee its agents or employees, and in any action brought to recover damages therefor judgment shall be recovered against the Lessor, the Lessee shall or will pay to the Lessor the amount of any and every such judgment that may have so obtained against the Lessor, together with all reasonable and proper costs, expenses and counsel fees to which the Lessor may or shall be subjected to the defense of such action or actions, provided, however, that the Lessor shall have given notice in writing to the Lessee of the pendency of such action and shall have afforded counsel of Lessee a reasonable time, if so requested, so co-operate with counsel of the Lessor in the defense of such action or actions.

Fifth: To indemnify and hold harmless the Lessor for all damages or loss of freight in its custody or control and all liability by reason thereof, and to cover such liability by an adequate and sufficient line of fire insurances, the policies to be examined and approved by the Lessor.

Sixth: To keep the sidewalks fronting said premises in good order and condition free and clear of snow and ice, and to in all respect assume the duty of complying at its own cost and expense, with all Police or Municipal requirements regarding the care of said walks.

It is hereby mutually understood and agreed:

I. That either party hereto shall have the right to determine this lease and the said tenancy at any time hereafter by going to the other party ninety (90) days' notice in writing, by legal service, of the intention so to do, and upon the expiration of such notice the said tenancy shall cease and the said Lessee shall quit and deliver up possession of the said premises to the Lessor. In the

event of the Lessor exercising its right to terminate this lease as aforesaid, without breach of covenant on the part of the said Lessee, the proportionate part of the rent paid in advance shall be refunded to the Lessee and accepted by it on full payment for that portion of the term unexpired for which rent was paid at the time the Lessor enters upon and resumes possession of the herein demised premises.

II. That of the Lessee shall fail or omit to pay the rent hereby reserved on the days and times when the same are made payable, or within ten (10) days thereafter, or if default be made in the performance of any of the convenants or agreements herein contained this lease shall terminate and become null and void, and from thenceforth it shall be lawful for the Lessor to re-enter the said premise and the same to have again as in its first and former state without any right on the part of the Lessee then or thereafter to save the forfeiture by payment of rent due, or by other performance of the condition or conditions thus violated, and upon such termination the Lessee shall peacefully deliver up possession of the said premises to the Lessor, and all rights and interests of the Lessee to and in the lease and the demised premises shall cease and terminate and end, and the Lessor shall have th eright, without further notice, to re-enter the said demised premises; the said Lessee hereby expressly waiving the service of any notice to quit possession, or of intention to re-enter, under the Statute or Code.

All rights and liabilities herein given to or imposed upon either of the parties hereto shall extend to the successors and assigns of such party as though they were in each case named.

In witness whereof, the parties hereto have hereunto affixed their respective corporate seals, duly attested, the day and year first above written.

.....**Railroad Company**

By..... .....
vice President

.....**Carloading and Distributing Co.**

By..... .....
President

APPENDIX VI

Agreement for Settlement of Car Hire at Transshipment Points.

(see Text pp. ~~173 to 177~~ 148-157)

Articles of agreement for settlement of car hire between the Mississippi warrior Service, Federal Barge Line and the Southern Railway on through traffic handled with the Southern System via Birmingport, Alabama effective 1927.

RAILROAD OWNED CARS.

I. On cars handled in road haul service, delivered to the Barge Line for unloading, or empty cars for return loading, a free time allowance of the actual time, with a maximum of three (3) days on each car so delivered will be allowed; time to be computed from 12:01 A.M. of the date actually or constructively, placed on interchange tracks at Ensley, Alabama. Cars delivered loaded, unloaded or reloaded, will be counted as two (2) cars, with a maximum allowance of six (6) days.

II. On cars delivered to the Barge Line in bad order or unsuitable for the commodity for which ordered, the Southern Railway will assume the per diem, not exceeding three (3) days, as specified in Article I the question of condition to be decided by the Chief Interchange Inspector, as now handled between the railroads.

III. On a car diverted, the Barge Line will reimburse the rail carrier for per diem accruing, in accordance with the forgoing article, until the car is interchanged in accordance with the practice between rail carriers.

IV. On empty cars delivered on order of the Barge Line and not used for outbound loading, the Barge Line will reimburse the Southern Railway for the total per diem accruing on such cars while in its possession.

V. The Southern Railway shall have the right to inspect and check all records of the Barge Line affecting transactions covered by this agreement.

VI. The provisions of this agreement shall only apply to per diem cars.

VII. The Barge Line will pay the Southern Railway the contemporaneous per diem rate on all cars in its possession which are held beyond the free time allowed in this agreement.

Equipment Hire on Barges ordered or operated by the Mississippi-Warrior Service-Federal Barge Line.

VIII. On cars ordered for loading with road haul traffic, written requisition will be made by the Barge Line forty-eight hours prior to the date required for loading, showing :

(1) Date or order.

(2) Date cars are required for loading.

(3) Number and class.

(4) Other requisite information that will enable the rail carriers to apply the proper and necessary equipment.

IX. If the Southern Railway fails to furnish such equipment within seventy-two (72) hours from the date cars are required for loading as stated in the requisition, the Southern Railway will pay to the Barge Line the prevailing per diem rate on each car of such traffic held for loading in excess of the seventy-two (72) hours, time to be computed from 12:01 A.M. of the date equipment is desired as shown in the requisition. This article applies to cars in road haul service only.

X. Payment due by either party to the order under this agreement shall be made promptly, or in any event, with thirty (30) days from the date statement of account is rendered.

XI. This agreement is effective and will continue in full force and effect from that date until changed by the Interstate Commerce Commission or terminated by service by either party on the other ninety (90) days notice of desire to determine same.

APPENDIX VII

Comparative Statement Showing Investments in Railroad, Public and Private Terminals at South Atlantic and Gulf Ports.

(see Text: Chapter VII)

Approximate Valuation of Terminal, Valuation from New Orleans to Wilmington, (N. C.) (I. C. C. Docket 12681 Exhibit S. A. 57 Witness Wait)

	Railroad	Public and Private
New Orleans		
Dock Board (estimate)		100,000,000
Private		1,750,000
Southern Ry. and Illinois Central	8,000,000	
Mobile		
Minicipal		1,000,000
Ala. State Dock Commission		9,000,000
Turner Terminal Company		1,000,000
Southern Ry. M. & O; L. & N.	2,735,489	
Pensacola		
Voted for Public		400,000
L. & N.	2,231,734	
Jacksonville		
Municipal Dock and Terminal		5,000,000
Private		750,000
A. C. L.	880,084	
S. A. L.	1,488,952	
Savannah		
S. A. L.	5,313,603	
A. C. L.	4,058,400	
Central of Georgia	5,262,036	
Charleston, South Carolina		
Port Utilities Commission		2,750,000
Army Base Terminal		6,000,000
Private		1,000,000
S. A. L.	789,160	
A. C. L.	50,000	
Wilmington		
Private		1,000,000
S. A. L.	1,503,744	
A. C. L.	353,508	
Total	32,666,710	129,650,000

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34 I.C.C. 453	72 I.C.C. 169	148 I.C.C. 299
35 I.C.C. 33	74 I.C.C. 135	157 I.C.C. 663
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